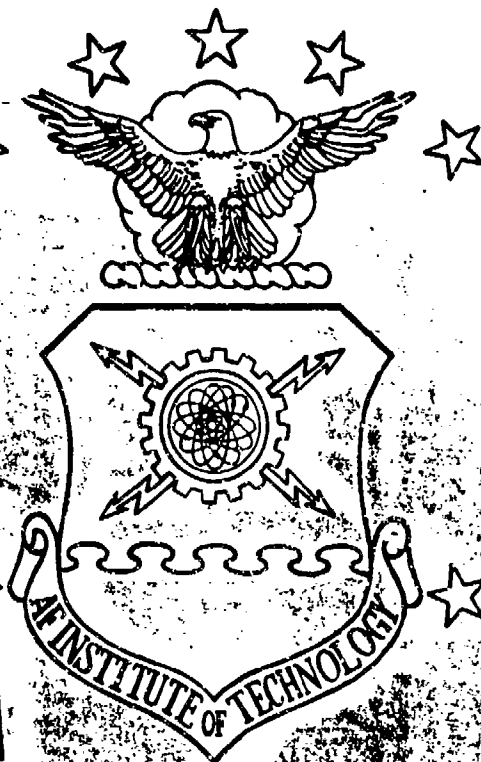




THE CERTIFICATION PROGRAM, TRAINING, AND
COMPETENCIES - AN EXAMINATION OF THE AIR FORCE
CONTRACTING WORK FORCE'S RESPONSE TO THE
SUFFICIENCY OF PROFESSIONAL TRAINING

THESIS

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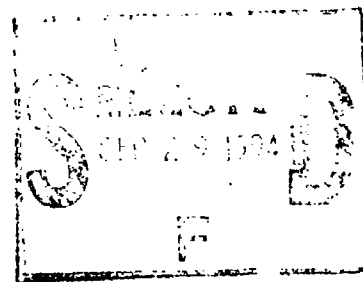
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DEPARTMENT OF THE AIR FORCE
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Wright-Patterson Air Force Base, Ohio

AFIT/GCM/LAR/94S-3



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THESIS

Presented to the Faculty of the
Graduate School of Logistics and Acquisition Management
of the Air Force Institute of Technology
Air Education and Training Command
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Contract Management

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September 1994

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Preface

The purpose of this study was to ascertain to what degree the current DOD training, as outlined in DOD 5000.52M, is sufficiently meeting the needs of Air Force contracting personnel. Surveys were administered to Air Force contracting personnel attending Professional Continuing Education courses. Students were surveyed on their attitudes, perceptions, and belief concerning the certification program, the training program, and the competencies which are used to build the training courses. The training program was viewed as sufficient by a slight majority of the respondents. Interesting viewpoints were also determined concerning the other career development program components - experience and education - as well as various other aspects of training. Since this research was the first in the career development program arena, numerous areas for further research have been identified as a result of this study.

Throughout the entire thesis process, several people have been instrumental to the completion of this effort. Many thanks are extended to our thesis advisors, Major Bob Pappas and Captain Paul Horst, for their excellent guidance and great advice. A very special thank you is also extended to our sponsor and especially to Lt Colonel Wilma Slade for her unending support and belief in the team and this effort. We both wish to thank our family and friends for all of their love, encouragement, and patience during the past year. Ms. Jones extends a personal thank you to Dan Warden, Pat Overgaard, Mom, and Emily for being there during the trying times. Lt Staugler personally acknowledges her special support received from Mom, Dad, Beth Rabine, and Tara.

Patty L. Jones

Suzanne O. Staugler

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Abstract

This study determined to what extent AF contracting personnel training needs are sufficiently being satisfied by the current DOD training as outlined in DOD 5000.52M. A convenience sample was employed. 499 surveys were administered to Professional Continuing Education students for various level I through III courses. 320 surveys were used for the data base, achieving a 64.1% response rate. The results of this study show that the training requirements were viewed as sufficiently ensuring that the AF has a mission ready professional work force by slightly more than half of the respondents. However, the training component was ranked as the most important component of the career development program by the fewest number of respondents. Respondents indicated the need for improvement in the areas of specificity and timeliness of training. The training courses were perceived as overall adequate in meeting respondent needs. Key competencies for review were identified based on upward trend and correlational analysis.

THE CERTIFICATION PROGRAM, TRAINING, AND COMPETENCIES - AN EXAMINATION OF THE AIR FORCE CONTRACTING WORK FORCE'S RESPONSE TO THE SUFFICIENCY OF PROFESSIONAL TRAINING

I. Introduction

General Issue

The Defense Acquisition Work Force Improvement Act (DAWIA) of 1990 was enacted to ensure the development of a quality acquisition work force to maintain the integrity of the defense acquisition system. To meet the challenges of the defense acquisition system of tomorrow, DAWIA established standardized criteria governing the experience, training, and education of acquisition personnel. These regulatory requirements and other guidance were captured in Department of Defense (DOD) Directive 5000.52, "Defense Acquisition Education, Training, and Career Development Program" and DOD Manual 5000.52M, "Career Development Program for Acquisition Personnel," which govern the program policy and procedures. As a result of DAWIA and the subsequent directive, DOD 5000.52, the Air Force (AF) initiated the Acquisition Professional Development Program (APDP) to provide the Air Force acquisition community with a revitalized version of a career development program to ensure all acquisition personnel receive the necessary experience, training, and education to effectively progress into more responsible and demanding positions. Brigadier General Robert Drewes, United States Air Force, Deputy Assistant for Contracting, indicated the need for a professional development program which capitalizes on the Air Force's most valuable resource - "people."

The Air Force continues to change in shape and size to better meet America's defense needs. We have a new, forward-reaching vision - Global Power and Reach for America. The business we are in, our mission, has been recently updated - to defend the United States through the control and exploitation of air and space. Contracting's contribution to tomorrow's Air Force is also clear - we acquire the supplies and services essential to the Air Force's daily operations and war-fighting mission in a manner that supports customers' needs at reasonable prices, meets all statutory and regulatory requirements, and inspires public trust. It is a challenging and awesome responsibility.

While contracting is an integral part of the Air Force team, we are unique. We do not rely on large "capital investments" in real estate, buildings, machinery, and equipment to get the job done. It is our people a dedicated, professional contracting team, more than 10,000 strong, that turns critical requirements and scarce dollars into air and space power. (Drewes, 1993: 23)

This research reviewed the sufficiency of the overall certification program as outlined in DOD 5000.52M. Specifically, the study sought to identify the sufficiency of the current training requirements of the certification program. As such, the research effort identified to what degree Air Force contracting personnel believe the training requirements are sufficiently meeting their needs in pursuit of satisfying the mission and attaining a more professional work force. Training was targeted as the primary focus of the three components - experience, training, and education - of the professional development program.

The key to professional development and mission success continues to be training. We identify the competencies our people need across the total contracting function in order to perform their responsibilities. We then provide training using many approaches, from formal, in-residence courses to OJT (On-the-Job Training) at the work place. (Drewes, 1993: 25)

The need has been identified for experienced, trained, and educated acquisition personnel to meet the challenges of tomorrow's defense acquisition system and the operating environment therein. DAWIA and DOD wide programs have been implemented to help ensure this need is successfully satisfied. Training plays a

substantial role in satisfying this objective. As such, it was vital to determine the extent to which the current training is sufficiently meeting the needs of AF contracting personnel.

Problem Statement

The question for this research effort involved the determination to what extent Air Force contracting personnel training needs are sufficiently being satisfied by the current DOD training as outlined in DOD 5000.52M.

Research Objectives

The purpose of this research was to ascertain to what degree the current DOD training, as outlined in DOD 5000.52M, is sufficiently meeting the needs of Air Force contracting personnel. This objective was accomplished by answering the following investigative questions:

1. To what extent was the training component of the career development program sufficiently meeting the current needs of AF contracting personnel?
2. To what degree did level I, level II, and level III personnel believe that the training component of the career development program is sufficiently meeting the current needs of AF contracting personnel?
3. What types of training courses were perceived to be adequate and consistent with personnel needs for support of the mission and the development of a professional work force?
4. To what extent is the individual's perception of the importance and/or need for the competency in job performance commensurate with the proficiency level at which the individual evaluates his/her proficiency?

Scope and Limits

The goal of the career professional development program is to use experience, training, and education requirements to establish a professional baseline for acquisition

personnel. While the overall perception of the certification program was targeted, the key emphasis of this research effort was the training component of the program. Training was the only aspect of the program targeted because the role of training is viewed as key to professional development and mission success.

This research examined the regulations and requirements, surveyed applicable contracting personnel, analyzed the findings, and provided recommendations concerning the sufficiency of the current AF contracting training program. Most of the analysis was based on the training needs identified by contracting personnel and was limited to the attitudes, experiences, and perceptions of contracting personnel.

Potential Benefits

DOD training needs are responding to the changing requirements of the acquisition work force of tomorrow. As such, DAWIA, and the subsequent programs to implement DAWIA, are in a state of continuous change. Therefore, the research findings generated from this study will be helpful in guiding the definition and development of the DOD program. While the focus of the study will target AF personnel, the results of the research may be utilized for the improvement of the entire DOD program because the career development program requirements for experience, training, and education, are standardized across all services.

Definitions

Contracting Personnel: Civilians in the 1102 career series and their military equivalents (Drewes, 1993: 24)

Contracting Officer: The government's agent for entering into, administering, and terminating contracts (FAR, 1993).

Defense Acquisition: The planning, design, development, testing, contracting, production, introduction, acquisition logistics support, and disposal of systems, equipment, facilities, supplies, or services that are intended for use in, or in support of, military missions (Land, 1993: 23.2).

Defense Acquisition Work Force: Permanent civilian employees and military members who occupy acquisition positions, who are members of an Acquisition Corps, or who are in acquisition development programs (Land, 1993: 23.2).

Need: 1. A lack of something necessary, useful, or desirable. 2. Obligation or requirement. 3. Something necessary, useful, or desirable: requisite (Websters, 1984).

Overview

This study explored one aspect of the professionalism of the AF contracting work force - training for contracting personnel. Throughout the remainder of this thesis, the study will examine to what extent mandatory DOD 5000.52M training requirements are meeting the needs of AF contracting personnel. Chapter 1 has provided a general introduction to the central research issue. Chapter 2 will examine the background of the problem and provide sources of literature to substantiate the problem area. Chapter 3 will describe the research design and methodology issues relevant to this study. Chapter 4 will address the analysis and findings of the study. Chapter 5 will explore the conclusions, recommendations, and closing comments relevant to this research.

II. Literature Review

Chapter Overview

This chapter focuses on the development and establishment of Defense Acquisition Work Force Improvement Act (DAWIA), and the subsequent issuance of DOD Manual 5000.52M which documents the policies and procedures of the professionalism program. This literature review examines applicable secondary sources and provides a review of the available background information. Secondary data will fulfill two of the three research purposes outlined by Emory and Cooper. It will 1) provide specific references pertaining to the study and, 2) provide early exploration and background information contributing to the study (Emory and Cooper, 1991).

The Defense Acquisition Work Force Improvement Act (DAWIA)

From the Hoover commission of 1949 to the Packard Commission of 1986, public concern for the quality and professionalism of the defense acquisition work force has been prevalent. The public outcry concerning the acquisition horror stories in the 1980's provided the push for a federal mandate to establish a quality acquisition work force with established experience, training, and education requirements. A 1990 Congressional report pointed to the three key areas of the defense acquisition system for potential modifications: 1) the process, 2) the structure, and 3) the people. The report noted that although the process and structure aspects of the system had been modified to try to attain a more efficient and effective acquisition system, the people aspect of the system had not been tackled (Land, 1993: 23.2). As Congressman Nicholas Mavroules stated,

Improving the DOD's acquisition process is one of our country's most pressing national security problems. By addressing the people issue, we take a big step in that direction. (Mavroules, 1991: 23)

The various executive commissions pointed to the need to "attract and retain the caliber of people necessary for a quality acquisition program" (Land, 1993: 23.5). As the Packard Commission concluded,

...training should be centrally managed and funded to improve utilization of teaching faculty, to enforce compliance with mandatory training requirements, and to coordinate overall acquisition training policies. (Land, 1993: 23.5)

A clear need to prepare the work force with professional training and education had been identified.

Congress enacted DAWIA in November 1990 to reform the acquisition work force. This legislation provided the framework necessary to improve the effectiveness of the acquisition work force. DAWIA was a part of the legislation the House passed within the National Defense Authorization Act, H.R. 4739, Public Law 101-510, Title XII (Mavroules, 1991: 16). To ensure a quality and professional work force, DAWIA established the following (Livingston, 1993):

1. Separate career boards for acquisition fields (Contracting, Program Management, and so on).
2. Distinct career paths for the fields.
3. Critical and non-critical acquisition positions.
4. Intern, scholarship, and other recruitment programs.
5. A line item budget to support the mandatory training.
6. The Defense Acquisition University (DAU), the educational consortium.
7. Certification levels (Level I, II, III) determined by standard education, training, and experience requirements.
8. An acquisition corps for performance in critical positions.
9. Rigorous qualification, entry level, and promotion requirements.
10. Standardized minimum qualifications for civilian and military contracting personnel and contracting officers.

Regulatory Guidance

From the passage of DAWIA in November 1990, regulatory guidance for DAWIA implementation DOD-wide was developed, drafted, and coordinated. DOD guidance provided six regulations and manuals concerning DAWIA. The regulations and manuals, subject matter, and dates issued are depicted in Table 2-1 below.

Table 2-1. Regulatory Guidance Concerning DAWIA

Regulation or Manual	Subject	Date Issued
DOD 5000.52 and DOD 5000.57	Policy and Defense Acquisition University (DAU) Establishment	Oct 91
DOD 5000.55 and DOD 5000.52M	Certification Standards	Nov 91
DOD 5000.551	Reporting Management Information	Nov 91
DOD 5000.58	Positions, Work Force and Special Qualifications	Jan 92

DOD 5000.52M operates as the primary implementing directive of DAWIA as it establishes the program's operation and administration throughout DOD. It outlines the program's design as follows (DOD 5000.52M, 1991: 1-1):

1. Attract, select, develop, and retain on a long term basis, a highly qualified work force capable of performing current and future DOD acquisition functions.
2. Meet current and future DOD needs for acquisition personnel and to provide capable replacements for senior acquisition positions on a planned, systematic basis.
3. Increase the proficiency of DOD acquisition personnel in their present positions and to provide guidance and opportunities for broadening experiences and progression commensurate with their abilities.
4. Improve the management and professionalism of the acquisition work force.

5. Incorporate requirements of applicable laws and directives issued by the DOD and the Office of Personnel Management.

The AF issued AFR 40-110 "Civilian Career Program Management" in November 1988 and AFR 36-27, "Officer Personnel, Acquisition Professional Development" in December 1990 to govern a career development program for both military personnel and civilians. These regulations were subsequently updated to include the DAWIA requirements and were used to implement the DOD directives at the AF level. The AF established a career development program which became known as the Air Force Professional Development Program (APDP, 1992). AFR 40-110 and 36-27 were rescinded in March 1992 when the Secretary of the Air Force for Acquisition (SAF-AQ) issued a policy letter which spelled out requirements for certification under APDP. This policy letter governed the program until December 1993. In December 1993, a subsequent policy letter was issued establishing new guidelines for all acquisition functions.

APDP was "designed to provide the acquisition community with a structure that ensures our (AF) people get the necessary training, education, and experience to effectively progress into more responsible and demanding positions" (APDP, 1992, 2). Later AF policy letters raised certification standards for AF personnel higher than those standards required by DOD. DOD reviewed the APDP increased standards and determined that military services shall not be able to place more stringent requirements upon personnel than those requirements outlined in DOD 5000.52M. This determination was outlined in the December 1993 policy letter and has standardized certification requirements for all the military services. A new version of DOD 5000.52M will be issued in the Fall of 1994 implementing this revision. DOD requirements for each certification level in contracting are indicated in Table 2-2.

Table 2-2. Professional Certification Requirements - Contracting

Level	Experience	Training	Education
I	1 year	Contracting Fundamentals Contract Pricing	Degree or 24 hours of business
II	2 years	Government Contract Law Intermediate Contract Pricing Intermediate Contracting Course in Primary Assignment	Same as Level 1
III	4 years	Executive Contracting Executive Contracting Course in Primary Assignment	Same as Level 1

Policy Letter, Dec 1993

The primary change to the contracting function was the reduction of the experience requirements from one, four, and eight years to one, two, and four years, respectively. Additionally, the AF can no longer require 80 hours of management training for level III contracting certification. Finally, to ensure that DAWIA and DOD are consistent, the Professional Military Education (PME) requirements will no longer be mandatory for military personnel.

Competency Based Education (CBE)

In 1986, DOD directed a comprehensive review of the contracting, quality assurance, and program management work force. To help establish the parameters for the training and education requirements within the program, the Defense Systems Management College (DSMC) established a review board comprised of representatives from all of the services and the Defense Logistics Agency (DLA). This board conducted an extensive review which resulted in the Acquisition Enhancement Program (ACE) Report, Vol 1, outlining the experience, training, and education requirements for fifteen various acquisition functions. The board also drafted DOD Directives 5000.48 and 5000.23 and recommended the formation of a central defense acquisition university

The need for maximum return on funds, instructors, students, time, and facilities required the board to establish standards for Competency Based Education (CBE). McAshan defines CBE as containing three elements: 1) specific competencies, 2) objectives and strategies to help achieve the established competencies, and 3) evaluation policies to assess if the student has achieved the desired level of learning (McAshan, 38). The Under Secretary of Defense (Acquisition and Logistics) implemented CBE at numerous service schools in 1986. At present, all Defense Acquisition University consortium schools utilize CBE to accomplish the training objectives set forth under DOD 5000.52M.

A subsequent study, ACE II, was accomplished in May of 1986. The study found that there was an overwhelming student population awaiting training per the required training curriculum. The report predicted that with the recommended requirements of the ACE I Report, this backlog would rise to almost one million students awaiting training. ACE II called for a "coordinated effort that crosses individual and Agency lines" (Committee on Armed Services, 1990:430). This provided the impetus for the establishment of the Defense Acquisition University (DAU). The DAU was officially dedicated in October 1992 with the primary mission "to prepare professionals for effective service in the DOD acquisition work force" (Sobieszczyk, 1993:15).

Need for Follow-up

As this literature review has indicated, numerous changes have been a part of the history of the evolution of the career development program. However, there has been little or no scientific study or follow-up to determine how these changes have actually affected the sufficiency of the program. There is a need for such an evaluation to provide a program baseline from which a reference point can be established to determine exactly

how each of the changes to the certification program are affecting the quality and professionalism of the work force.

Key Definitions

DAWIA intends to provide a professional work force through "experience," "training," and "education," therefore these terms must be defined for clarity. Several sources were examined to define these terms in relation to the defense acquisition system and the goals of DAWIA. After the sources were examined, the list of terms was expanded to include "professionalism," "competency," "certification," and "career professional development." The additional terms were included because of their relationships to experience, training, and education, within the DOD program. The terminology, definitions, and sources are listed below.

Continuing Education and Training: A mandatory education or training standard established by a Functional Advisor or Functional Board, which is determined to be essential for maintaining currency in a career field and must be accomplished by members of the acquisition work force in the career field for which the standard is established regardless of the individual's certification level. (DOD 5000.52M, 1991:ix)

Experience: Participation or observation leading to skill (Websters, 1984).

Professionalism: Professionalism is derived from the word profession - an occupation in which one professes to be skilled. It also refers to a body of persons engaged in a calling. Significantly, it derives from the act of professing or publicly declaring entry into a religious order (Committee on Armed Services, 1990:414).

Competency: Demonstrable composite knowledge, skills, abilities, characteristics, or traits related to effective task performance on the job (McAshan, 1979:45).

Certification: The process of formally recognizing completion of mandatory education, training, and experience. DOD 5000.52M, November 1991, lists the training requirements for certification (Policy Guide, 1994:4).

Career/Professional Development: The professional development of employee potential by integrating the capabilities, needs, interests, and aptitudes of employees participating in a career program through a planned, organized, and systematic method of training and development designed to meet organizational objective. It is accomplished through work assignments, job rotation, training, education, and self development programs (DOD 5000.52M, 1991: viii).

Summary

The 240,000 persons who are currently part of the acquisition work force oversee the procurement of more than \$120 billion in military goods and services each year. Even accounting for the huge budget cuts we anticipate this decade, we will still be talking about a procurement system that is larger than the gross national product of all but a handful of nations. This demands skills that stem from professionalism, from education and solid training, and from substantial work experience. (Mavroules, 1991: 23)

The need has been identified for experienced, trained, and educated acquisition personnel to meet the challenges of tomorrow's defense acquisition system. DAWIA and DOD wide programs have been implemented to try to ensure these needs are successfully met. As with most programs striving to meet the challenges of tomorrow, the DOD training program must be reviewed to ensure it is sufficiently meeting the needs of the personnel. The type, variety, and content of the courses which make up the training program must be evaluated to ensure the personnel are receiving the right training, at the right time, constructed of the right material. It is through the identification and incorporation of the right mix of training that will lead the acquisition work force into the future and accomplishing the mission in a professional manner. Chapter 3 will review the methodology employed to determine to what degree the current DOD training is meeting AF contracting personnel needs.

III. Methodology

Chapter Overview

This chapter discusses and reviews the particular methodology issues relevant to this research study. The data collection plan and analyses help to provide the data needed to determine the extent to which the training, as outlined in DOD 5000.52M, meets the needs of AF contracting personnel in support of providing a mission ready professional work force. This chapter will examine the research method, methodology literature, population and sample, instrument development and testing, and the data collection plan.

Method

The research was accomplished by a formal method based on 1) the literature review, 2) consultations with key personnel, and 3) a survey. Through the collection of primary data, the investigative questions as outlined in Chapter 1 were examined. A survey was chosen as the proper instrument for data collection because it was more versatile, economical, and efficient when compared to observation. Additionally, by utilizing a survey to collect the data, it allowed for 1) exact selection of well-worded questions geared to specific data collection, and 2) better geographic coverage to reach the target samples (Emory and Cooper, 1991: 318).

Population and Sample

The steps in sampling design were followed in order to determine the appropriate sample for this research study. Based on Emory and Cooper, the following sampling design issues were addressed:

What was the relevant population? The problem statement was specific to one branch of military service, the AF. Further, it was geared to a particular career field, contracting. As such, the relevant population was all AF contracting personnel.

What were the parameters of interest? The problem statement was specific to the issue of training within the program outlined in DOD 5000.52M, therefore training was a parameter of interest. Since proper training was one element which enabled a certification level to be attained under the program as outlined in DOD 5000.52M, the certification level was also a parameter of interest.

What was the sampling frame? Based on the population and the parameters of interest, a representative sample of AF contracting personnel was used. To accomplish this objective, we sampled the following 1994 Professional Continuing Education (PCE) Courses.

DAU Course Number	Title	Level
CON 101/102	Systems/Base Level Contracting	I
CON 104	Principles of Contract Pricing	I
CON 105	Operational Level Contract Pricing	I
CON 201	Government Contract Law	II
CON 221	Intermediate Contract Administration	II
CON 222	Operational Level Contract Administration	II
IND 101	Contract Property Administration	II
IND 103	Intermediate Contract Property Administration	II
CON 301	Executive Contracting	III

These courses, and subsequently the personnel attending these courses, were targeted as the sampling frame due to the designation of DOD certification levels, as indicated above. The personnel attending the courses were reflective of the certification level. This assumption allowed the researchers to better estimate the potential of attaining a representative sample of the population.

What was the type of sample to be employed? Because of the sample and parameter constraints and the ability to maximize response and minimize costs, a convenience sample of PCE students was used (Emory and Cooper, 1991:274).

What was the size of the sample needed? As Kiejcie and Morgan note, the following formula was used to determine the sample size for each sample field (Isaac and Michael, 1990: 192):

$$n = \frac{Nz^2 * .25}{(d^2 * [N-1] + (2 * .25))} \quad n = 373.51$$

$$373.51 = \frac{6993 (1.96)(1.96)*.25}{(.05)(.05)*(6993-1)+(2*.25)}$$

where n = Sample Population
 N = Population
 z = Z Score
 d = Chance for Error

499 personnel were surveyed to ensure that at least n or 374 personnel returned the surveys, because of the calculations resulting from the formula above and the expectation of a 75% response rate.

How much did it cost to employ? To hold down survey costs, the survey was administered to PCE students attending courses at Wright-Patterson AFB, OH; Lackland AFB, TX; and off-site courses sponsored by the PCE school at Wright-Patterson AFB, OH.

Three distinct levels of workers were targeted for this research study - level I, level II, and level III personnel - in order to be reflective of the three levels of certification within DOD and APDP. These levels were established as a process by which personnel could progress through standards of experience, training, and education - level I (basic), level II (intermediate), and level III (advanced). Due to DOD data base limitations in constructing numbers for the relevant population, those personnel who did not hold a certification level were classified as seeking a level I certification or equivalent to level I personnel.

The sample populations were constructed in order to reflect 1) three different views of thought on the variables of interest due to certification level, and/or 2) similar attitudes and perceptions concerning the variables of interest. Stratified sampling improved statistical efficiency, facilitated the data gathering to ensure the data was

sufficient to analyze the sub-populations, and allowed the option to use different research methods within the different strata (Emory and Cooper, 1991: 266).

Instrument Development

The survey was used to collect primary data. The use of a survey was determined through a review of the advantages and disadvantages of various data collection instruments (Emory and Cooper, 1991: 338). One survey targeted the entire sample. Surveys provided an instrument with lower costs than personal interviews, greater reach of a dispersed sample, ease of contact of busy and mobile personnel, more reflection time for the respondent, and higher anonymity for the respondent. The disadvantages of utilizing surveys were non-response to the survey and limited information gathering. The use of a convenience sample combated these disadvantages in that the ability to reach and motivate personnel was more likely.

The instrument response structure was structured with both open-ended and close-ended questions. The use of a five point Likert scale for close ended questioning was a simple, common format, requiring less time for the respondent to select a response, allowing for correct range of application, and was a method compared favorably with other data collection methods (Emory and Cooper, 1991: 209). To seek the opinions and perceptions within the survey instruments, open-ended questions were employed. Throughout the instrument development, continual evaluation of the schedule design, question context, question wording, response structure, and question sequence occurred to ensure quality and quantity responses (Emory and Cooper, 1991: 135).

Testing

The instrument was tested to identify problems prior to data collection (Emory and Cooper, 1991: 179). There were two pretest groups associated with the instrument

testing. One test group consisted of the AFIT contracting graduate class. The second test group consisted of one randomly chosen PCE class. These two test groups allowed the content validity to be examined through analysis of 1) question wording, 2) shared vocabulary, 3) question clarity, 4) assumptions, 5) biased wording, and 6) personalization (Emory and Cooper, 1991:361). Pretest findings were corrected and/or incorporated into the instrument. Findings from the pretests included:

1. Numbering scheme off
2. Likert scale categories hard to distinguish
3. Basic format suggestions
4. Spelling and typographical errors

Data Collection Plan

The data collection plan was developed to foster ease of implementation and accuracy in collection of data. Recording sheets for the surveys consisted of Automatic Data Processing (ADP), AFIT Data Collection Form 11E which facilitated the full range of responses to the survey. Data was collated and interpreted based on the computer collation and interpretation of the data by the statistical program, Elementary Statistical Analysis System (SAS). These results were randomly checked to ensure control over the procedure. The five open-ended questions were collated by hand by the researchers.

Validity was examined to determine if the data were relevant to the proper measures and were free from bias through the examination of normality plots and alpha correlations. This was performed at $p = .0001$, where p is equal to chance for error.

Plan of Analysis

Frequency tabulations, summary statistics, and correlational analysis were utilized to evaluate the majority of the close-ended questions. Close-ended questions 43 through 200 used Pearson's correlational analysis to determine the correlation between

competency importance and proficiency. To identify those competencies which required further analysis, competencies were examined for an increasing upward trend in the correlational values from level I personnel to level III personnel. The research team assumed that there was a correlation between importance and proficiency. Therefore, as the certification level of personnel increased, the correlational values were expected to increase, or at least remain equal. An r less than or equal to .39 (where r = correlation), with a p greater than or equal to .05 (where p = chance for error), were used as the values for determining competency importance and proficiency not to be correlated. All open-ended questions were categorized and ranked according to open-ended coding (Emory and Cooper 1991:457). A listing of the competencies and their correlations appears in Appendix E. Response categories for open ended questions one, two, and four included 1) certification program, 2) training, 3) education, and 4) experience. Response categories for open-ended question three included 1) most beneficial class and 2) least beneficial class. Sub-categories were also used, as well as an "other" category to ensure exhaustive coding procedures were in place. Because some comments included a number of responses answering many of the questions at once, the comments were broken apart into the various categories. A single comment may have been sorted into many categories, based on the subject matter. A listing of the response categories appears with the open-ended answers in Appendix E.

Due to the qualitative nature of the data collected, the data was categorized and displayed in tables and graphs. The presentation of the data was driven by the moderating variables -the demographic items on the survey. From these displays, a summary of the data facilitated a review for patterns in the data. Potential improvements in training as seen by the different levels of personnel, as well as the overall sample population, were identified.

Summary

The research was conducted through a formal method of collection of primary data. The design utilized a survey instrument to target three different worker levels of the sample field - level I, level II, and level III. To accomplish this, surveys were utilized and pretested. Because of the stratified nature of the data, it was analyzed and displayed in table and graphical formats. The results and analysis of the data will be discussed in Chapter 4.

IV. Data Collection and Analysis

Chapter Overview

The data analysis is provided in this chapter. The research results will be presented in three sections - survey response, demographics, and investigative questions. Various methods were used to generate the data and consisted of frequency tabulations, summary statistical analysis, and correlation analysis. The response rate to the various questions in the instrument varied. All numbers reflected throughout this section are based on the total number of responses to a particular question in the instrument. The survey instrument as presented to the participants appears at Appendix A.

Survey Response

The relevant sample was based on the 6993 Air Force contracting personnel in the population. The sample population was determined to be 374 personnel. 499 surveys were distributed and 333 were completed and returned. Surveys were reviewed for missing data. Thirteen were not included in the data base because of missing data. Not all surveys included in the data base contained complete information, but every effort was made to use as much data as possible. Surveys were discarded because the respondents 1) incorrectly coded the survey sheet and corrections were not possible, or 2) failed to answer the survey instrument beyond the demographic questions. The final data base for this analysis was generated from 320 surveys. A response rate of 64.1% was attained.

Demographics

The demographic section of the survey consisted of ten questions. These questions identified key distinguishing parameters of the sample. The question areas are noted below. Detailed demographic data is listed in Appendix C.

1. Rank/Grade or Series - Officer
2. Rank/Grade or Series - Enlisted
3. Rank/Grade or Series - Civilian
4. Education Level
5. Experience Level
6. Supervisory Experience
7. Executive/Management Experience
8. Present Job Title
9. Contracting Certification
10. Type of Contracting Function Assigned To

The over sampling and under sampling which are prevalent in the sample statistics were difficult to control. The demographic make-up of the individuals participating in the survey through selected training classes was anticipated to be representative of the population. Courses were chosen to be sampled based on the certification level rating given to the course, for example, Advanced Contract Administration is rated as a level II course. This assumption affected the final sample statistics because not all personnel in typical level I, II, and III courses were certified at that particular level. Further, the researchers could not identify the mix of officer, enlisted or civilian personnel that would be attending a given training course. As such, some over sampling and under sampling occurred for certain portions of the sample population.

Survey Questions 1 - 3: Rank/Grade or Series - Officer, Enlisted, Civilian

Table 4-1. Population and Sample Statistics by Officer, Enlisted, and Civilian

	Population		Sample		Difference
	# of Personnel	Percentage	# of Personnel	Percentage	
Officer	826	11.8%	67	20.9%	9.1%
Enlisted	1339	19.1%	77	24.1%	5.0%
Civilian	4828	69.0%	176	55.0%	-14.0%
Total	6993	100.0%	320	100.0%	

The demographic analysis provided many statistics about the sample. Table 4-1 compares the entire population make-up to the sample population make-up. The civilian portion of the sample comprised 55.0% of the respondents. The officer and enlisted sample population comprised 20.9% and 24.1%, respectively. Comparing these sample population figures to the relevant population figures, there is an indication that the civilians within the sample population were under sampled (-14.0%). However, the officers (+9.1%) and enlisted (+5.0%) were over sampled.

Survey Question 4: Education Level

The education levels of the sample reflect 62.8% of the respondents held a bachelor's degree or higher. While no Ph.D.'s were noted, 20.6% of the respondents held masters degrees. High levels of education were expected due to the APDP educational requirement for 24 semester hours of business education or a bachelor's degree. Only 2.8% of the respondents had no college education. This was anticipated because of new enlisted people entering the career field and the grandfathering of civilians for the educational requirements for certification.

Survey Questions 5 -7: Contracting , Supervisory, and Executive Experience Levels

There were three areas of experience identified for evaluation: contracting, supervisory, and executive. Civilian respondents held the largest amount of contracting experience of five years or greater (45.6%). Enlisted respondents held the least amount of contracting experience of five years or greater (11.9 %). Those respondents having had more than one year of supervisory experience were 43.4%. 11.3% of the sample population indicated they had some executive experience.

Survey Question 8: Present Job Title

The majority of the respondents (37.8%) were contract specialists. The fewest jobs held by the respondents were represented by procurements analysts (4.4%). A number of respondents (14.7%) indicated that they fell into the other category.

Survey Question 9: Contracting Certification

Individual certification levels provided a different statistical perspective about the sample population. Table 4-2 provides a comparison of the relevant population to the sample population by certification level.

Table 4-2. Population and Sample Statistics by Certification Levels

	Population		Sample		Difference
	# of Personnel	Percentage	# of Personnel	Percentage	
Level I	2189	31.3%	138	43.1%	11.8%
Level II	4147	59.3%	143	44.7%	-14.6%
Level III	657	9.4%	39	12.2%	2.8%
Total	6993	100.0%	320	100.0%	

The level II portion of the sample comprised 44.7% of the respondents. The level I and III sample population consisted of 43.1% and 12.2% of the respondents, respectively. Comparing these sample population figures to the relevant population figures, there is an

indication that the level II's of the sample were under sampled (-14.6%). Level I's and III's were over sampled by +11.8% and +2.8%, respectively.

Survey Question 10: Type of Contracting Function Assigned To

The majority (52.8%) of the contracting functions represented were made up of the operational or base-level. The systems-level function was the second highest group represented, with 12.5% of the respondents. The training function comprised the smallest group, with only 4.1% of the respondents. Because of the use of a convenience sample, the research team had no control over the make-up of the Professional Continuing Education (PCE) courses surveyed. Additionally, the Air Force Training Center at Lackland AFB, TX was used as a survey distribution point. These factors may explain the larger number of operational-level respondents.

Investigative Questions

The investigative questions were analyzed based on the individual answers to a variety of questions in the survey instrument. Appendix B provides a tabular representation of the survey questions which were used to answer each investigative question. The training component of the certification program was the focus of the investigative questions. As such, the moderating variables used to facilitate the analysis of the investigative questions were certification levels.

Survey questions 11 through 200, with the exception of question 15, used a five point Likert scale. Five open-ended questions were included in the survey addressing various topics. Four of the open-ended questions were used to answer the investigative questions. One question concerning competencies was not used due to a small portion (< 5%) of the population responding. All data were analyzed according to the methodology plan outlined in Chapter 3.

The remainder of this section will present the analysis of the data for each of the investigative questions guiding this research study. Appendix C details data concerning survey questions 11 through 42, Appendix D details data concerning survey questions 43 through 200, and Appendix E details data concerning the open-ended questions.

Investigative Question 1: To what extent was the training component of the career development program sufficiently meeting the current needs of AF contracting personnel?

Survey Questions 13, 15, 36 to 42, Open Ended Questions 1, 2, and 4

Survey questions thirteen and fifteen specifically sought to determine the sufficiency of the training requirements in ensuring that the Air Force has a mission ready contracting work force that can provide effective customer support. Question 13 determined to what extent respondents believe the training requirements are sufficient. 57.2% of respondents indicated that the training requirements are sufficient.

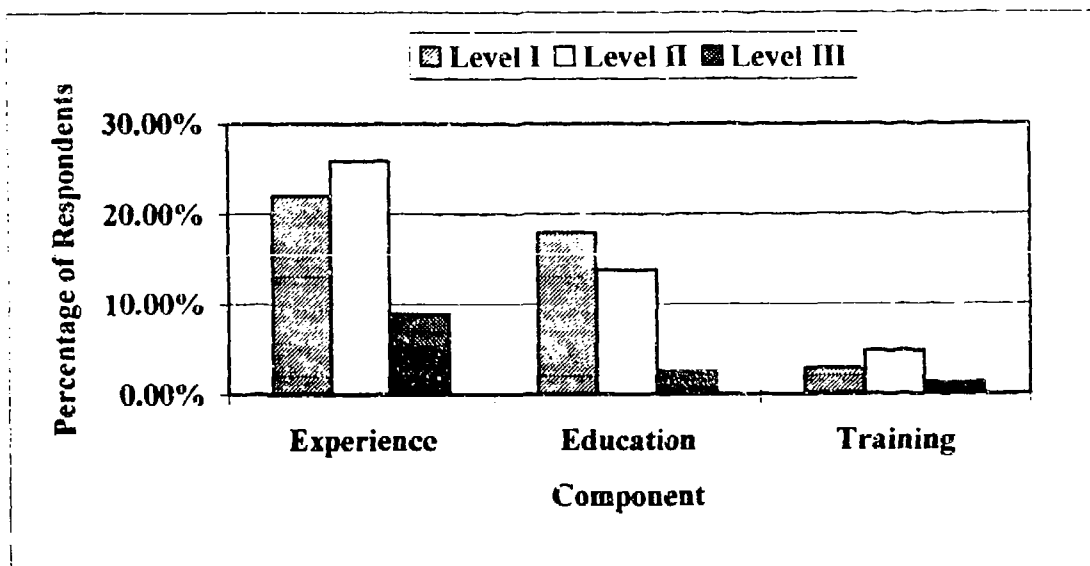


Figure 4-1. Certification Requirements - Ranking of Importance

When the respondents were asked to rank the three components in question 15 - experience, training, and education - 56.9% of the respondents ranked experience the

most important component. 34.2% of the respondents ranked education the most important component and 8.9% ranked training the most important component. Figure 4-1 displays the respondents' ratings of the relative importance of the three components.

Survey questions 36 through 42 were used to target different aspects of training to determine if particular training needs are being met. These questions used a five point Likert scale from strongly disagree to strongly agree. A summary of the overall viewpoints of the sample for each of the questions is presented in Table 4-3.

Table 4-3. Overall Ratings - Questions 36 to 42

No.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
36.	The current training program is intended to familiarize me with various aspect of contracting.				
	1.3%	1.6%	8.2%	68.0%	20.9%
37.	The current training program is beneficial to my ability to perform my current job.				
	0.6%	5.4%	17.9%	57.2%	18.9%
38.	The current training program is specific enough to help me perform my current job.				
	1.9%	17.6%	25.8%	45.3%	9.4%
39.	I usually receive training when I need it.				
	18.6%	26.4%	16.4%	31.1%	7.6%
40.	My training needs are better met through alternate training sources.				
	5.4%	29.8%	41.0%	18.7%	5.1%
41.	Once I have attended a training course, I am better able to perform my job.				
	0.9%	4.4%	21.1%	57.6%	16.0%
42.	After I have attended a training course, I am better able to apply the material presented.				
	0.3%	6.3%	23.3%	55.0%	15.1%

For question 36, 88.9% of the respondents agreed that the training program is intended to familiarize them with various aspects of contracting. The majority of respondents for question 37 also agreed that the training program is beneficial to their ability to perform their jobs (76.1%). For question 38, 54.7% of the respondents indicated that they agreed that the program is specific enough. Question 39 presented a

different picture with 45.0% of the respondents disagreeing with the statement that they receive training when they need it and only 38.7% agreeing. The majority of the respondents were neutral (41.0%) for question 40 concerning meeting training needs through alternate training sources. 73.6% of the respondents agreed with question 41 concerning ability to perform after training. The majority of the respondents (70.1%) agreed with question 42 about increased ability to apply material.

To summarize, the majority of the respondents agreed that the training program is 1) intended to familiarize; 2) beneficial to job performance; and 3) provides specific enough training. Also, the majority of respondents agreed that the individual training courses better enable them to 1) perform their jobs, and 2) apply the material presented in the courses. It is noted that the respondents were neutral concerning the need for alternate training sources. Finally, the larger percentage of the respondents disagreed that they receive training when they need it.

Open-ended questions 1, 2, and 4 were categorized into three response categories: Certification Program Satisfaction and Importance, Certification Program Dissatisfaction and Concerns, and Certification Program and Established Standards. The top five categories concerning the respondents are listed in Table 4-4.

Table 4-4. Top Five Categories of Comments and/or Concerns

Ranking	# of Responses*	Category of Comment and/or Concern
1	28.3%	Program is Perceived as Having Value or Worth
2	17.6%	Experience Requirements are Too Low
2	17.6%	Training Needs and Suggestions
3	15.1%	Training Applicability
4	13.8%	Importance of Experience
5	13.2%	Training Availability

*Percentages are calculated from a base of 159 respondents

The comments and concerns parallel the findings in the close-ended questions. The overall program was perceived as valuable and meeting respondents' needs. Experience was noted as the most important component in meeting the goals of APDP. Finally, comments and concerns on training needs, applicability, and availability are reflective of the responses received on questions 36 through 42.

Investigative Question 2: To what degree did level I, level II, and level III personnel believe that the training component of the career development program is sufficiently meeting the current needs of Air Force contracting personnel?

Survey Questions 13, 15, 36 to 42

The same survey questions used to answer investigative question one were also used to answer investigative question two. Investigative question one was a macro-viewpoint of the training component sufficiency, whereas this investigative question is the micro-viewpoint of the training component sufficiency by certification levels of respondents. It was expected that training needs are unique for each level, therefore each survey question was examined at the different levels. Response rates reflected throughout this section are in terms of the percentage of respondents within the applicable certification level, not the entire sample population.

Table 4-5. Sufficiency of Current Training Requirements Within Certification Levels

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	3.6%	15.9%	24.6%	49.3%	6.5%
Level II	2.1%	20.3%	19.6%	49.0%	9.1%
Level III	2.6%	25.6%	12.8%	59.0%	0.0%

Table 4-5 indicates the viewpoints of the personnel do change based upon certification levels. The majority of level I (55.8%), level II (57.8%) and level III (59.0%) respondents agree that the current training requirements are sufficient. However, a higher percentage of level III respondents (28.2%) disagree with the

sufficiency of the training requirements, compared to level I (19.6%) and level II (22.5%) respondents.

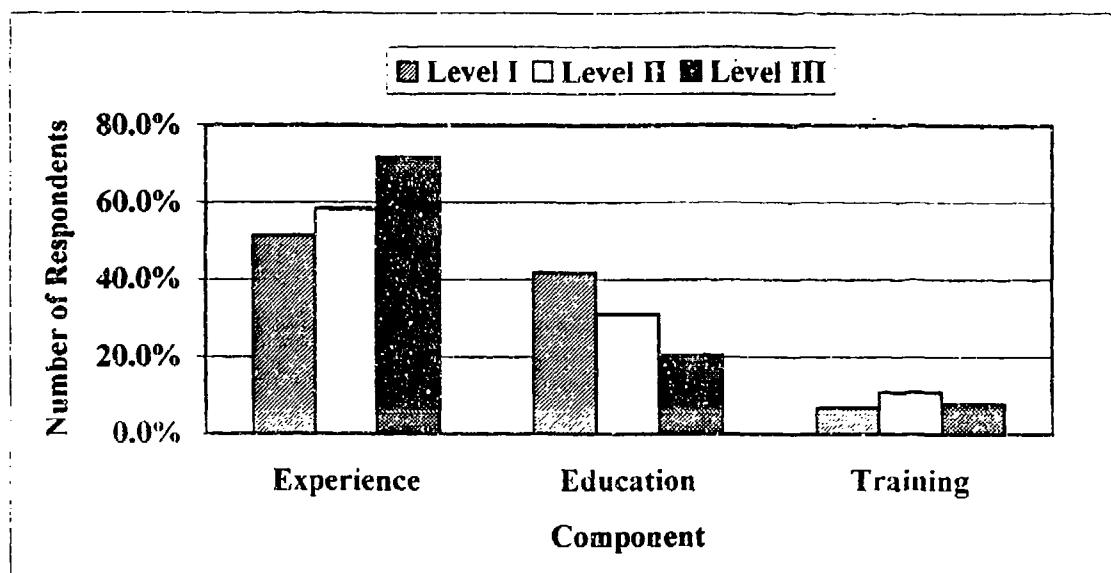


Figure 4-2. Certification Requirements - Ranking of Importance Within Levels

Figure 4-2 indicates that certification levels of personnel also provide different viewpoints. 71.8% of Level IIIs rated the experience component as the most important, with 58.3% of level IIs rating it most important, and 51.5% of the level Is rating it the most important component. It is noted that the importance of experience increased with each progressive certification level. The respondents' evaluation fluctuates between the levels. Level II respondents rated the training component the most important (10.8%), with levels IIIs being slightly less at 7.7% and level Is responding at 6.7%. The education component's importance decreased with each progressive certification level. 41.8% of level I respondents rated education as most important, while level IIs responded at 30.9% and level IIIs responded at 20.5%.

Questions 36 through 42 were used to target various aspects of training at the different certification levels. Each question was examined for changing perceptions

between the certification levels. This evaluation also compares the level analysis to the overall sample population analysis presented for investigative question one.

Table 4-6. Responses to Question 36 Within Certification Levels

The current training program is intended to familiarize me with various aspects of contracting.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.5%	1.5%	8.1%	66.9%	22.1%
Level II	0.7%	2.1%	10.0%	66.4%	20.7%
Level III	2.6%	0.0%	2.6%	79.5%	15.4%

For question 36, all three levels agreed that the training program is intended to familiarize them with contracting. Level I (89.0%), level II (87.1%), and level III (94.9%), perceptions were close to the rating of the entire sample (88.9%).

Table 4-7. Responses to Question 37 Within Certification Levels

The current training program is beneficial to my ability to perform my current job.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.0%	5.8%	15.2%	59.4%	19.6%
Level II	0.7%	5.0%	21.4%	54.3%	18.6%
Level III	2.6%	5.1%	15.4%	61.5%	15.4%

Question 37 found consistent responses across the levels agreeing that the current training is beneficial. Level I (79.0%), level II (72.9%) and level III (76.9%) agreed that the current training is beneficial. This was consistent with the sample population evaluation of 76.1%.

Table 4-8. Responses to Question 38 Within Certification Levels

The current training program is specific enough to help me perform my current job.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.4%	15.9%	29.7%	44.2%	8.7%
Level II	2.1%	19.3%	23.6%	45.0%	10.0%
Level III	2.6%	17.9%	20.5%	51.3%	7.7%

Question 38 also found that the three levels were close in agreement concerning if the training program was specific enough for job performance. Level I (52.9%), level II (55.0%), and level III (59.0%) paralleled the percentage of the sample (54.2%).

Table 4-9. Responses to Question 39 Within Certification Levels

I usually receive training when I need it.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	21.0%	27.5%	21.0%	24.6%	5.8%
Level II	20.7%	27.1%	15.0%	30.7%	6.4%
Level III	2.6%	20.5%	5.1%	56.4%	15.4%

Question 39 found some dispersion amongst the levels. Level I (48.5%), level II (47.9%) and level III (23.1%) disagreed that they usually receive training when they need it. Level I and II figures are consistent with the overall sample (45.0%). However, level III figures are not. The majority of level III respondents agreed with this question (71.8%)

Table 4-10. Responses to Question 40 Within Certification Levels

My training needs are better met through alternate training sources.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	4.4%	26.8%	44.2%	21.6%	3.6%
Level II	6.6%	27.0%	40.9%	18.2%	7.3%
Level III	5.1%	51.3%	30.8%	12.8%	0.0%

For question 40, level I and II respondents within each level were neutral. Level I (44.2%) and level II (40.9%) held consistent with the sample (45.0%), whereas level III (30.8%) respondents were not as neutral concerning question 40. Level IIIs disagreed (56.4%) that their training needs are better met through alternate sources.

Table 4-11. Responses to Question 41 Within Certification Levels

Once I have attended a training course, I am better able to perform my job.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.0%	4.3%	18.8%	58.0%	18.8%
Level II	2.1%	5.0%	20.0%	57.9%	15.0%
Level III	0.0%	2.6%	33.3%	56.4%	7.7%

For question 41, level III (64.1%) were most consistent with the sample (63.6%) in agreeing that they are better able to perform their job after they have attended a course. Level I (76.8%) and level II (72.9%) had stronger figures agreeing with question 41. The level IIIs had a larger number of respondents who were neutral on this question (33.3%).

Table 4-12. Responses to Question 42 Within Certification Levels

After I have attended a training course, I am able to apply the material presented.					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.0%	5.8%	22.5%	53.6%	18.1%
Level II	0.7%	6.4%	20.7%	57.9%	14.3%
Level III	0.0%	7.7%	35.9%	51.3%	5.1%

Level I (71.7%) and level II (72.2%) respondents were closest in agreement to the overall sample (70.1%) for question 42. 56.4% of the level III respondents agreed with this question, however a large number of the level IIIs (35.9%) were neutral.

Investigative Question 3: What types of training courses were perceived to be adequate and consistent with personnel needs for support of the mission and the development of a professional work force?

Survey Questions 16 to 35, Open-Ended Question 3

Respondents evaluated the current certification training courses on a five point Likert scale on the basis of strongly disagree to strongly agree. Of the courses evaluated, a range of 64.3% to 100.0% of respondents ranking the courses as adequate. The rankings of the top five courses in terms of adequately meeting the respondents' needs are listed below in Table 4-13.

Table 4-13. Top Five Courses Perceived as Most Adequate

Ranking*	Certification Training Course Title
1	Government Contract Law
2	MDAC - Basic
3	Principles of Cost and Pricing
4	MDAC -Advanced
5	Defense Cost and Price Analysis/Negotiations

*Rankings are calculated from a weighted base of 1749 training classes attended.

Open-ended question 3 asked respondents to identify the training courses perceived most and least beneficial. The top five responses for the training courses perceived as most beneficial are listed in Table 4-14.

Table 4-14. Top Five Training Courses Perceived as Most Beneficial

Ranking	# of Responses*	Training Course
1	28.0%	Government Contract Law
2	24.4%	MDAC - Basic
3	15.6%	MDAC- Advanced
3	15.6%	Contract Administration - Advanced
4	12.2%	Principles of Contract Pricing
5	6.1%	Base Contract Administration

Percentages are calculated from a base of 82 respondents

It is noted that similar courses are found in each of the top five listings for both the closed-ended and open-ended questions.

Investigative Question 4: To what extent is the individual's perception of the importance and/or need for the competency in job performance commensurate with the proficiency level at which the individual evaluates his/her proficiency?

Survey Questions 43-200

Survey questions 43 through 200 rated 79 units of instruction, or competencies. The competencies were evaluated in two areas 1) the importance to overall job performance and 2) the current level of proficiency. A five point Likert scale was employed. To evaluate how much the importance and proficiency factors differed, an

overall ranking of the importance levels was compiled. Graphs and supporting documentation are in Appendix D.

The top 10 competencies, ranked by importance, are displayed in Table 4-15. The bottom 10 competencies, ranked by importance are displayed in Table 4-16.

Table 4-15. Top Ten Competencies by Importance

Ranking	Value	Unit of Instruction (Competency)
1	88.5%	Contract Modifications
2	87.8%	Competition Requirements
3	87.5%	Statements of Work
4	85.7%	Ethics/Standards of Conduct
5	85.3%	Conducting Negotiations
6	84.8%	Solicitation Preparation
7	84.6%	Specifications
8	83.1%	Responsiveness
9	82.8%	Negotiation Strategy
10	82.6%	Method of Procurement

Table 4-16. Bottom Ten Competencies by Importance

Ranking	Value	Unit of Instruction (Competency)
1	31.1%	Letter Contracts
2	28.3%	Lease vs. Purchase
3	26.0%	Need for Bonds
4	25.6%	Unsolicited Proposals
5	22.8%	Forecasting Requirements
6	21.7%	Bonds
7	21.4%	Collecting Contractor Debts
8	19.6%	Market Research
9	18.1%	Contract Financing
10	17.0%	Accounting and Estimating Systems

Correlation analysis was performed on the 79 competencies to determine the degree of correlation between the individual's perception of the competency's importance and the individual's proficiency level. An examination for upward trends in the correlation values for each of the certification levels was then performed. An upward

trend was anticipated by the research team because, for each certification level, as the importance of competency rises, so should the proficiency level. Therefore, the gap between importance and proficiency should collapse or close as personnel progress from level I through level III. 18 competencies which did not reflect an upward trend are listed in Table 4-17. Competencies with $p > .05$ and/or $r < \text{or} = .39$ were determined not to be correlated. Correlations in **bold** represent those competencies that are not correlated. Competencies which are not correlated provide that respondents perceive a large difference between the perceived importance of the competency and their perceived proficiency for that competency. Appendix D includes the listing of other competencies which are not correlated based on the stated p and r values.

Table 4-17. Competencies Without Upward Trend From Level I to Level III

Unit of Instruction (Competency)	Level I	Level II	Level III
Acquisition Planning	0.19	0.24	0.18
Market Research	0.50	0.48	0.45
Statements of Work	0.44	0.40	0.59
Services Contracting Issues	0.53	0.71	0.47
Set-Asides	0.33	0.51	0.40
8(a)Procurements	0.35	0.51	0.32
Technical Evaluation Factors	0.28	0.48	0.30
Procurement/Source Selection Plans	0.33	0.59	0.31
Selection of Contract Type	0.31	0.54	0.37
Processing Bids	0.43	0.61	0.53
Late Bids	0.43	0.59	0.41
Bid Prices	0.45	0.61	0.46
Responsiveness	0.43	0.63	0.59
Cost and Pricing Data	0.28	0.44	0.34
Audits	0.09	0.42	0.37
Property	0.35	0.46	0.39
Collecting Contractor Debts	0.10	0.45	0.39
Progress/Advance Payments	0.42	0.39	0.59

Summary

This chapter has provided the results of this research effort in support of determining the sufficiency of professional training of AF contracting personnel. The data reflects that some discrepancies do exist in how AF contracting personnel perceive the certification program, particularly the training component. Chapter 5 will provide the conclusions and recommendations pertaining to these areas.

V. Conclusions and Recommendations

Chapter Overview

The following section provides the conclusions and recommendations drawn from this effort, study limitations, and suggestions for further study. As the DOD continues to downsize, more and more emphasis has been placed on getting the most from every dollar committed in the acquisition arena. The current career development program strives to establish an elite group of career professionals who are capable of satisfying the mission with the most effective and efficient use of resources. Training is vital to the success of this program. This research effort has provided the perceptions, attitudes, and beliefs of the Air Force contracting work force concerning the current training and how sufficiently it is ensuring that the Air Force has a mission ready professional contracting work force.

Conclusions and Recommendations

Investigative Question 1. To what extent was the training component of the career development program sufficiently meeting the current needs of AF contracting personnel?

Conclusion 1. Even though the training requirements were viewed as sufficiently ensuring that the Air Force has a mission ready professional contracting work force by slightly more than half of the respondents, they were ranked as the most important component by the fewest number of respondents. This indicates that while over half of the respondents viewed the training requirements as sufficient, training is not viewed as the most important component to ensuring the AF has a mission ready professional contracting work force.

Experience was ranked as the most important component by more than half of the respondents. However, less than half of the respondents perceived experience as sufficient. This indicates that the respondents perceive experience as the most important component to ensuring the AF has a mission ready professional contracting work force, but do not believe that the experience requirements are sufficient.

Recommendation. Increase Experience Requirements. An individual can now progress to a level III certification in half the time of the past AF program requirements. This could be detrimental to the contracting career field which relies on the experience quotient for job performance. In addition, a person progresses through the training courses at a more rapid pace. This may severely impact the training program's applicability, availability, and timeliness.

Conclusion 2. Respondents indicated strong agreement concerning the role of the training program to familiarize them with various aspects of contracting. There was also a strong percentage of agreement indicating that the training is beneficial to job performance and ability to apply material presented in the courses. However, respondents indicate a need for instruction beyond familiarization because only half of the respondents noted that the training is specific enough. This implies that while the courses are being taught at a familiarization level, more specific topics are needed. If more specific topics were incorporated into the courses, job performance and ability to apply the material could be expected to increase. However, this is only true if the person uses this topic for job performance.

Almost half of the respondents indicated that they do not receive training when they need it. However, over one-third agreed that they do receive it when they need it. This indicates a need to establish a better way to monitor progression throughout the program and ensure that the courses are 1) available, 2) taken at the right time for career

progression and 3) targeting the appropriate audiences based on applicable functions (i.e. base-level versus systems-level).

Recommendations.

1. Focus Courses to Better Meet Needs of Personnel. Incorporate more specific topics into the current course structures. Utilize some of the training suggestions and topics identified in this study to begin to isolate potential areas for inclusion into the courses. Additionally, ensure that courses are targeting a well-rounded audience with specific functional contracting concerns.

2. Develop Formal On-the-Job-Training (OJT) Programs. Specificity and applicability of training has been identified as a key area for concern within the training program. As such, a more formalized OJT program should be developed. OJT programs can be tailored to the more specific needs at the unit. It will help ensure that the work force has a demonstration phase for the skills and knowledge which they have learned from the Professional Continuing Education (PCE) courses. This program could be easily tailored to meet individual needs in training topics, progression rate, etc.

3. Establish Career Development Progression Management Information System (MIS). Determine and establish an on-line system which provides 1) recommended time frames for progression throughout training program, 2) access for training monitors to input actual needs for training slots, and 3) capability of training monitors to monitor each individual's career plan. To augment this MIS, establish a model career plan to provide an example for ideal career progression for the contracting work force.

Investigative Question 2. To what degree did level I, level II, and level III personnel believe that the training component of the career development program is sufficiently meeting the current needs of AF contracting personnel?

Conclusion 1. As the certification level increased, the training requirements were ranked as sufficient with small increasing percentages of respondents from level I to level III. The ranking of the importance of the training component was the lowest of the three components for all certification levels. The viewpoints of the level I to III respondents are consistent with the overall population.

The experience requirement has a decreasing rating of sufficiency from level I to III. The largest difference in perception of the experience requirements was noted from the level II to the level III perspective. The majority of level III's disagreed that the experience requirements are adequate. In addition, the importance of the experience component increased from level I to III. These findings were consistent with the sample population in indicating that while the experience component is the most important, it is not sufficient. Level III's hold the strongest perception of the discrepancy between sufficiency and importance of the experience component.

Conclusion 2. Level III respondents consistently held the most different perceptions concerning training. First, the majority of level III's agreed that they receive training when they need it. This was not true with level I's and II's. Additionally, over half of level III's disagreed that their training needs are better met through alternate sources. The majority of level I's and II's were neutral. Level III respondents were also lowest in agreement that after training 1) they are better able to perform their jobs and 2) are able to apply the material. However, level III's were also the group with the most respondents agreeing that the program is specific enough.

Recommendation. Basic, Intermediate, and Advanced Courses. Although some course structures already exist in this format, courses should be tailored to the three

levels to meet the progression of needs of the individual. Course structure should be guided by the needs identified by the respondents in the survey concerning specificity, applicability, timeliness, etc.

Investigative Question 3. What types of training courses were perceived to be adequate and consistent with personnel needs for support of the mission and the development of a professional work force?

Conclusion. The various training courses were rated well - with a range of 64.3% to 100.0% - indicating that the courses are perceived as overall adequate. The level I and II courses were consistently rated the highest in adequacy. Level III courses did not get a high number of adequate ratings. This is consistent with the viewpoints of level III's on training, since level III's identified the most inconsistencies with training. Ratings indicate that all courses are perceived to provide benefit to the individual and the program. The courses rated most beneficial paralleled the courses rated most adequate. Comments indicate that the number one reason why the courses were perceived as most beneficial was the courses' applicability to the job.

Recommendation. Evaluate Level III Courses. The level III courses were not ranked as inadequate, however, none of the courses were ranked in the top five of the courses perceived as the most beneficial. Additionally, the level III respondents indicated a problem might exist within the training courses in that the level III's did not perceive certain aspects of the training program similar to level I and II respondents. As such, a review of the currency and applicability of the level III courses should be performed.

Investigative Question 4. To what extent is the individual's perception of the importance and/or need for the competency in job performance commensurate with the proficiency level at which the individual evaluates his/her proficiency?

Conclusion. Differences in perceptions of competency importance and competency proficiency exist. Of the competencies rated the most and least important, a range of 38.9% to 88.5% was noted. Only five competencies were rated with less than a 50.0% importance rating.

Certain competencies are identified for potential review based on two types of analysis 1) trend analysis and 2) correlational analysis. 18 competencies were identified on the basis that they did not display the expected upward trend for correlational values from level I to level III. Various competencies were identified for each certification level on the basis that the correlational values indicated that the competency importance and proficiency were not correlated. This listing can be viewed in Appendix D.

Recommendations.

1. Establish Comprehensive and Continuous Review of Competencies.

Respond to the need for further evaluation of those competencies identified in this study. Currency of topics is vital to meeting the challenges of the defense acquisition system of tomorrow. Therefore, establish a permanent board to review the topics quarterly. Within this board, establish a direct line from the unit (i.e. training monitors, squadron commanders, deputies, etc.) to be able to pursue a total quality management bottom-up review approach and funnel suggestions for potential units of instruction.

2. Validate Needed Proficiency Levels. While this study only sought to identify competencies for further review, there is a need to establish some sort of proficiency baseline - how proficient must the individual realistically be to perform within the established level. The goals for the proficiency levels which are established for the courses may or may not be attainable within current training program.

Study Limitations

Various study limitations were noted in this research effort. Most of the limitations were recognized prior to conducting the research.

First, a convenience sample was employed. The distribution of personnel attending the PCE courses was expected to produce a distribution of personnel similar to the relevant population. Because the attendance was predetermined, the demographic make-up of the courses was difficult to control. The survey statistics presented in Chapter 4 indicate this caused the civilian and level II sample population to be under sampled.

Next, the individuals attending the courses may or may not have been the most appropriate to survey, since participants were receiving training and therefore more acutely aware of their ideas and perceptions on training. This limitation may apply more to the new personnel of the contracting work force - since their knowledge base concerning the contracting career field and the career development program may be limited. However, perceptions of the entry-level respondents could not be ignored because a training program must target all personnel - from those having no experience to those having extensive experience.

A third limitation was that the survey instrument was lengthy. As a result, some interest may have been lost for those items toward the end of the survey instrument. This may have caused some leveling of answers by respondents.

Another limitation to this study was that the participants were limited to AF contracting personnel. Although DOD career program requirements are standardized, some service-unique philosophies may be prevalent which this effort cannot identify.

The final study limitation was a self-rating problem for survey questions 43 through 200. Respondents were asked to rate how important and how proficient they

were for certain competencies. The potential for over-inflated ratings for each individual was high, since human nature is to inflate self-ratings.

Suggestions for Further Study

Many potential areas for future research were identified. This research was the first in the career development program arena and has spawned numerous areas for further review.

Administer Survey Instrument to Contracting Policy-Making Personnel.

Administering the current survey instrument to policy making personnel would provide a basis for comparison between those making the contracting policies and those working within the policies established. Comparison of the two data bases could provide a baseline to identify commonalties and discrepancies between the two groups.

Focus on Competency Evaluation. The competencies in this effort were reviewed only to identify those competencies which have need for further review. A need exists to establish a baseline for required competency proficiency for each certification level. This would enable an instrument to be drafted to determine if the competency importance perceived by the individual and the established, required proficiency levels of the competencies were congruent. This evaluation is vital because of the key role competencies play in the whole training process. Competencies are the building blocks by which the training courses evolve to include the topics and ultimately the course structure and the training program in general.

Survey Other Services. While this study can be generalized across DOD, certain service-unique philosophies may impact training, and the career program as a whole. A survey targeting other services to determine to what degree their training needs are being met would allow for better comparison.

Evaluation of Other Program Components - Experience and Education. This research only determined the extent to which the training program is sufficiently meeting the needs of AF contracting personnel. The findings indicate that the respondents perceive experience and education as more important than training in developing the work force. As such, experience and education should be addressed individually in a study to determine to what extent education and experience requirements are meeting the needs of AF personnel in ensuring the AF has a mission ready professional work force.

Target Public and Private Sector with a Survey Instrument to Determine Differences in Training Programs. A survey instrument could be placed in a professional magazine or journal - i.e. *National Contract Management Association* magazine - which would reach both audiences. The survey would try to identify what current training programs are available - formal and informal - and determine the alternatives for training and how effective these alternatives are perceived. This would be a good starting point for establishing new types of training and/or reinforcing the training which is already in place.

Appendix A: Survey Instrument

The following pages display the survey instrument as it was presented to the survey participants.

Cover Page

**AIR FORCE INSTITUTE OF TECHNOLOGY
SURVEY
ON
AIR FORCE
CONTRACTING PERSONNEL
TRAINING NEEDS**

Reference Code: _____



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC



OFFICE OF THE ASSISTANT SECRETARY

6 APR 1994

MEMORANDUM FOR CONTRACTING COURSE ATTENDEE

SUBJECT: Training Survey

A comprehensive and responsive training program is vital to ensure that Air Force contracting personnel are ready to meet the acquisition challenges of today and tomorrow. As such, the evaluation and update of the contracting training program is an evolutionary process in pursuit of the development of a professional work force capable of successfully fulfilling our mission.

The attached survey seeks your opinions and experiences with the current training program. The results will aid the Air Force Institute of Technology in their research and will also be provided to functional managers throughout the Air Force and the Department of Defense. Although your input is strictly voluntary, I strongly urge your participation in this research process. This is your opportunity to express your concerns and ideas for the future training agendas of the contracting community. Your opinions and experiences are important to us. I thank you in advance for your time and comments.

ROBERT W. DREWES, Brig Gen, USAF
Deputy Assistant Secretary (Contracting)
Assistant Secretary (Acquisition)

Attachment:
Survey

Survey Instructions:

Purpose: The purpose of this survey is to help identify strengths and weaknesses in the training program for Air Force contracting personnel. This survey is being conducted by Air Force Institute of Technology graduate students and is sponsored by the Air Force Program Executive Office for Career Management at the Pentagon. This survey will be used to identify areas of training which need improvement. The ultimate goal is to ensure that the specific training needs of Air Force contracting personnel are met.

Anonymity: Each survey is assigned a coded number for administrative purposes only. Your name will not be used or associated with this survey in any manner.

Results: The results of this research will be published in an AFTT thesis in September 1994 and the final report will be permanently stored with the Defense Technical Information Center (DTIC). As a participant in this survey, you will have an opportunity to obtain a summary of the findings and conclusions. Your instructor will make available a sign-up sheet for you to indicate your desire to receive a summary.

Instructions:

1. Use only a number 2 pencil on the answer sheet.
2. **DO NOT** put your name on the survey or the answer sheet.
3. Please answer every item.
4. Answer all items according to your initial reaction. Please do not change your response to previous items based on information presented in later items.
5. Some items ask for your opinion. There are no right or wrong opinions. We want to know how you view your training needs.
6. Additional instructions are provided in the survey where needed.
7. This survey has been designed to take approximately 30 to 40 minutes. Do not spend too much time on any particular question.
8. Once you have completed this survey, return it together with your answer sheet to the instructor.

Privacy Act Statement

In accordance with AFR 12-35, para 30, the following information is provided as required by the Privacy Act of 1974:

- a. Authority: 5 USC 301, Departmental Regulations; and/or 10 USC 8012, Secretary of the Air Force Powers, Duties, Delegation by Compensation.
- b. Principal Purpose: To sample Air Force contracting personnel opinions and attitudes concerning training.
- c. Routine Uses: To provide data as part of a AFTT thesis study.
- d. Participation in this survey is voluntary and respondents will not be identified. No adverse action of any kind may be taken against any individual who elects not to participate in any or all parts of this survey.

PART I: Demographics - Please mark all your responses directly on the survey as well as on the answer sheet.

Current Rank or Grade and Series: Indicate your current rank or grade. Answer only one question of the three choices provided. Please be careful when indicating your response on the computerized answer sheet provided. Skip the questions that do not apply.

1. Officer (64Px)

2. Enlisted (6C0xx)

3. Civilian (1102)

1. 0-1
2. 0-2
3. 0-3
4. 0-4
5. 0-5
6. 0-6

1. E-1 to E-3
2. E-4
3. E-5
4. E-6
5. E-7
6. E-8
7. E-9

1. GS-5 or GS-7
2. GS-9
3. GS-11
4. GS-12
5. GS/GM-13
6. GS/GM-14
7. GS/GM -15

4. Education: Indicate the highest level of education obtained.

1. High School Degree
2. Some College
3. Associates Degree
4. Bachelors Degree

5. Masters Degree
6. Masters Degree Plus
7. Ph.D

5. Experience: Indicate the number of years of contracting experience you have obtained. (This may be a combined total for individuals with both military and civilian experience.)

1. Less than 1 year of experience
2. 1 - 2 years of experience
3. 3 - 4 years of experience
4. 5 - 10 years of experience

5. 11 - 15 years of experience
6. 16 - 20 year of experience
7. More than 20 years of experience

6. Supervisory Experience: Indicate the amount of supervisory experience you have obtained.

1. No supervisory experience
2. Less than one year supervisory experience
3. 1 - 2 years of supervisory experience
4. 3 - 4 years of supervisory experience
5. 5 - 10 years of supervisory experience
6. 11 - 15 years of supervisory experience
7. More than 15 years of supervisory experience

7. Executive/Management Experience: Answer Yes or No.

1. **No** - I have **not** held a position of executive responsibility such as Commander, Deputy Commander, Director or other equivalent position.
2. **Yes** - I have held or am currently holding a position of executive responsibility such as Squadron Commander, Deputy Commander, Director or other equivalent responsible position.

8. Present Job Title: Indicate your present job title.

1. Contract Negotiator
2. Contract Specialist
3. Contract Administrator
4. Procurement Analyst
5. Contract Price and/or Cost Analyst
6. Contracting Officer (ACO, TCO, etc.)
7. Other. Please indicate position title:

9. Contracting Certification: Indicate the appropriate level of certification officially obtained. If you will receive a certification upon completion of the training class you are currently taking, please check that level.

1. No Certification
2. Level I Certification Received
3. Level II Certification Received.
4. Level III Certification Received.

10. Type of Contracting Function Assigned To: Indicate the appropriate contracting function currently assigned to:

1. Systems Acquisition
2. Operational
3. Specialized
4. Headquarters
5. Contract Administration Organization
6. Training
7. Other: Please indicate function.

Part II The Certification Program

Background: To improve the management and professionalism of the acquisition workforce, the Defense Acquisition Workforce Improvement Act (DAWIA) of 1990 was enacted. The Air Force, in an effort to ensure complete mission ready support, initiated the Acquisition Professional Development Program (APDP) to implement DAWIA requirements. APDP established a certification program for all acquisition personnel, specifying minimum education, experience and training standards required to become certified and hold positions at each certification level. This program has now been adopted throughout the Department of Defense (DOD). The following table outlines the mandatory certification requirements, applicable to all DOD acquisition employees.

Professional Certification Requirements Contracting

Level	Experience	Training	Education
I	1 year	- Contracting Fundamentals - Contract Pricing	Degree or 24 hours of business
II	2 years	- Government Contract Law - Intermediate Contract Pricing - Intermediate Contracting Course in Primary Assignment	Same as Level I
III	4 years	- Executive Contracting - Executive Contracting Course in Primary Assignment	Same as Level I

Please answer the following questions about the Air Force APDP and requirements as identified above. Responses for questions 11 through 14 should be based on the following scale.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

11. The current certification requirements are sufficient to ensure that the Air Force has a mission ready professional contracting workforce that can provide effective customer support. 1 2 3 4 5
12. The current experience requirements are sufficient to ensure that the Air Force has a mission ready professional contracting workforce that can provide effective customer support. 1 2 3 4 5

13. The current training requirements are sufficient to ensure that the Air Force has a mission ready professional contracting workforce that can provide effective customer support. 1 2 3 4 5
14. The current education requirements are sufficient to ensure that the Air Force has a mission ready professional contracting work force that can provide effective customer support. 1 2 3 4 5
15. Select which of the three requirements, experience, training or education, you think is most important to ensure that the Air Force has a mission ready professional contracting workforce that can provide effective customer support.
1. Experience
 2. Training
 3. Education

How do you view the certification program?

Is there anything additional that you would like to add pertaining to the certification program and its relationship to a mission ready professional workforce.

Part III: The Mandatory Training Program

Background: As part of the certification program, certain training courses are required at each of the three levels. The primary goal of training is to ensure the development of a professional, mission oriented, contracting workforce. Although some individuals may have met their mandatory training requirements through an equivalent college program or equivalency examination, the focus of this section is the DOD training classes. *Please note that the following classes are listed by their current training title and you may know the course by a slightly different title. If further assistance is needed, please refer to the last page of this survey for a more detailed listing.*

Rate the **OVERALL** adequacy of the training material presented as it pertains to your ability to perform your current job. **(DO NOT RATE THE INSTRUCTOR OR QUALITY OF PRESENTATION, ONLY THE GENERAL MATERIAL THAT WAS PRESENTED AND ITS APPLICABILITY TO YOUR JOB.)** Rate **ALL** the courses you have taken regardless of the mandatory requirements.

Highly Inadequate 1	Inadequate 2	Borderline 3	Adequate 4	Highly Adequate 5	Have Not Attended 6
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Level 1 Current DOD Training Courses Available

16. Management of Defense Acquisition Contracts - Basic.	1	2	3	4	5	6
17. Central Systems Level Contracting.	1	2	3	4	5	6
18. Operational Level Contracting.	1	2	3	4	5	6
19. Construction Contracting Fundamentals.	1	2	3	4	5	6
20. Principles of Contract Pricing.	1	2	3	4	5	6
21. Base Level Pricing.	1	2	3	4	5	6
22. Defense Cost & Price Analysis/Negotiation.	1	2	3	4	5	6

Level 2 Current DOD Training Courses Available

23. Government Contract Law.	1	2	3	4	5	6
24. Intermediate Pricing.	1	2	3	4	5	6
25. Management of Defense Acquisition Contracts - Advanced.	1	2	3	4	5	6
26. Advanced Contract Administration.	1	2	3	4	5	6
27. Base Contract Administration.	1	2	3	4	5	6
28. Advanced Contract Management - Construction.	1	2	3	4	5	6
29. Overhead: Contract Overhead Management.	1	2	3	4	5	6
30. Cost Accounting Standards Workshop.	1	2	3	4	5	6
31. Defense Contracting for Information Resources.	1	2	3	4	5	6

Level 3 Current DOD Training Courses Available

32. Executive Contracting.	1	2	3	4	5	6
33. Management of Defense Acquisition Contracts - Executive. .	1	2	3	4	5	6
34. Executive Contract Administration.	1	2	3	4	5	6
35. Executive Cost and Price Analysis.	1	2	3	4	5	6

Please answer the following questions about the mandatory training requirements identified on the previous page. All questions should be based on the following scale.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

36. The current training program is intended to familiarize me with various aspects of contracting. 1 2 3 4 5
37. The current training program is beneficial to my ability to perform my current job. 1 2 3 4 5
38. The current training program is specific enough to help me perform my current job. 1 2 3 4 5
39. I usually receive training when I need it. 1 2 3 4 5
40. My training needs are better met through alternate training sources. 1 2 3 4 5
41. Once I have attended a training course, I am better able to perform my job. 1 2 3 4 5
42. After I have attend a training course, I am able to apply the material presented. 1 2 3 4 5

What training class or classes, either mandatory or non-mandatory, have you attended that you thought were most or least beneficial to you in the performance of your job. Also, indicate why the classes were most or least beneficial.

Most: _____ **Least:** _____

Is there anything additional that you would like to add pertaining to the training portion of the certification program or about training in general

Part IV Needs Analysis

Background: The following 79 units of instruction have been identified by the Defense Contracting Career Management Board and faculty members of Defense schools as the basis for mandatory curriculum for DOD contract specialists.

For each of the following areas of instruction please make **two judgments**. First rate the importance of each training objective as it applies to your overall ability to perform your job by circling a number from 1 to 5 (1 = very unimportant; 2 = not important; 3 = so-so; 4 = important; 5 = very important.) Second, indicate your current level of proficiency in each area (1 = no experience; 2 = not proficient; 3 = somewhat proficient; 4 = rather proficient; 5 = highly proficient).

	Importance					Proficiency						
	Importance to overall ability to perform job.					How well I can perform or demonstrate this ability						
	VERY UNIMPORTANT	NOT IMPORTANT	SO-SO	IMPORTANT	VERY IMPORTANT		NO EXPERIENCE	NOT PROFICIENT	SOMEWHAT PROFICIENT	RATHER PROFICIENT	HIGHLY PROFICIENT	
<u>Determining the Need & Initiating the Acquisition</u>												
Forecasting Requirements	43.	1	2	3	4	5	44.	1	2	3	4	5
Acquisition Planning	45.	1	2	3	4	5	46.	1	2	3	4	5
Purchase Requests	47.	1	2	3	4	5	48.	1	2	3	4	5
Funding Process	49.	1	2	3	4	5	50.	1	2	3	4	5
Market Research	51.	1	2	3	4	5	52.	1	2	3	4	5
<u>Analyzing the Requirement and Determining the Extent of Competition</u>												
Specifications	53.	1	2	3	4	5	54.	1	2	3	4	5
Statements of Work	55.	1	2	3	4	5	56.	1	2	3	4	5
Services Contracting Issues	57.	1	2	3	4	5	58.	1	2	3	4	5
Sources of Supply/Services	59.	1	2	3	4	5	60.	1	2	3	4	5
Set-Asides	61.	1	2	3	4	5	62.	1	2	3	4	5
8(a) Procurements	63.	1	2	3	4	5	64.	1	2	3	4	5
Competition Requirements	65.	1	2	3	4	5	66.	1	2	3	4	5
Unsolicited Proposal	67.	1	2	3	4	5	68.	1	2	3	4	5

Source Selection Planning

Lease Vs. Purchase	69.	1	2	3	4	5	70.	1	2	3	4	5
Price Related Factors	71.	1	2	3	4	5	72.	1	2	3	4	5
Technical Evaluation Factors	73.	1	2	3	4	5	74.	1	2	3	4	5
Method of Procurement	75.	1	2	3	4	5	76.	1	2	3	4	5
Procurement/Source Selection Plans	77.	1	2	3	4	5	78.	1	2	3	4	5

Setting Terms and Conditions for the Solicitation

Selection of Contract Type	79.	1	2	3	4	5	80.	1	2	3	4	5
Letter Contracts	81.	1	2	3	4	5	82.	1	2	3	4	5
Contract Financing	83.	1	2	3	4	5	84.	1	2	3	4	5
Govnt Property & Supply Sources	85.	1	2	3	4	5	86.	1	2	3	4	5
Need for Bonds	87.	1	2	3	4	5	88.	1	2	3	4	5
Solicitation Preparation (IFBs/RFPs)	89.	1	2	3	4	5	90.	1	2	3	4	5
Publicizing Proposed Procurements	91.	1	2	3	4	5	92.	1	2	3	4	5
Preaward Inquiries	93.	1	2	3	4	5	94.	1	2	3	4	5
Prebid/Preproposal Conferences	95.	1	2	3	4	5	96.	1	2	3	4	5
Amending Solicitations	97.	1	2	3	4	5	98.	1	2	3	4	5
Canceling Solicitations (IFBs/RFPs)	99.	1	2	3	4	5	100.	1	2	3	4	5

Evaluating Bids and Proposals

Processing Bids	101.	1	2	3	4	5	102.	1	2	3	4	5
Bid Acceptance Periods	103.	1	2	3	4	5	104.	1	2	3	4	5
Late Bids	105.	1	2	3	4	5	106.	1	2	3	4	5
Bid Prices	107.	1	2	3	4	5	108.	1	2	3	4	5
Responsiveness	109.	1	2	3	4	5	110.	1	2	3	4	5
Processing Proposals	111.	1	2	3	4	5	112.	1	2	3	4	5
Technical Evaluations	113.	1	2	3	4	5	114.	1	2	3	4	5
Price Objectives	115.	1	2	3	4	5	116.	1	2	3	4	5
Cost and Pricing Data	117.	1	2	3	4	5	118.	1	2	3	4	5
Audits	119.	1	2	3	4	5	120.	1	2	3	4	5
Cost Analysis	121.	1	2	3	4	5	122.	1	2	3	4	5
Evaluating Other Terms & Conditions	123.	1	2	3	4	5	124.	1	2	3	4	5
Competitive Range	125.	1	2	3	4	5	126.	1	2	3	4	5

Discussing Proposals and Executing Awards/Protests and Fraud

Fact-finding	127.	1	2	3	4	5	128.	1	2	3	4	5
Negotiation Strategy	129.	1	2	3	4	5	130.	1	2	3	4	5
Conducting Negotiations	131.	1	2	3	4	5	132.	1	2	3	4	5
Mistakes in Bids/Proposals	133.	1	2	3	4	5	134.	1	2	3	4	5
Responsibility	135.	1	2	3	4	5	136.	1	2	3	4	5
Subcontracting Requirements	137.	1	2	3	4	5	138.	1	2	3	4	5
Preparing Awards	139.	1	2	3	4	5	140.	1	2	3	4	5

Awards	141.	1	2	3	4	5	142.	1	2	3	4	5
Debriefing	143.	1	2	3	4	5	144.	1	2	3	4	5
Protests	145.	1	2	3	4	5	146.	1	2	3	4	5
Fraud and Exclusion	147.	1	2	3	4	5	148.	1	2	3	4	5

Initiating Work Under the Contract and Quality Assurance

Contract Administration Planning	149.	1	2	3	4	5	150.	1	2	3	4	5
Post-Award Orientations	151.	1	2	3	4	5	152.	1	2	3	4	5
Ordering Against Contracts	153.	1	2	3	4	5	154.	1	2	3	4	5
Consent to Subcontract	155.	1	2	3	4	5	156.	1	2	3	4	5
Monitoring, Inspection & Acceptance	157.	1	2	3	4	5	158.	1	2	3	4	5
Delays	159.	1	2	3	4	5	160.	1	2	3	4	5
Stop Work	161.	1	2	3	4	5	162.	1	2	3	4	5
Remedies	163.	1	2	3	4	5	164.	1	2	3	4	5
Property	165.	1	2	3	4	5	166.	1	2	3	4	5
Reporting Performance Problems	167.	1	2	3	4	5	168.	1	2	3	4	5

Payments and Accounting

Limitation of Costs	169.	1	2	3	4	5	170.	1	2	3	4	5
Invoices	171.	1	2	3	4	5	172.	1	2	3	4	5
Unallowable Costs	173.	1	2	3	4	5	174.	1	2	3	4	5
Assignment of Claims	175.	1	2	3	4	5	176.	1	2	3	4	5
Collecting Contractor Debts	177.	1	2	3	4	5	178.	1	2	3	4	5
Progress/Advance Payments	179.	1	2	3	4	5	180.	1	2	3	4	5
Price and Fee Adjustments	181.	1	2	3	4	5	182.	1	2	3	4	5
Accounting and Estimating Systems	183.	1	2	3	4	5	184.	1	2	3	4	5
Cost Accounting Standards	185.	1	2	3	4	5	186.	1	2	3	4	5
Defective Pricing	187.	1	2	3	4	5	188.	1	2	3	4	5

Miscellaneous

Contract Close-outs	189.	1	2	3	4	5	190.	1	2	3	4	5
Contract Modifications/Options	191.	1	2	3	4	5	192.	1	2	3	4	5
Terminations	193.	1	2	3	4	5	194.	1	2	3	4	5
Bonds	195.	1	2	3	4	5	196.	1	2	3	4	5
Claims	197.	1	2	3	4	5	198.	1	2	3	4	5
Ethics/Standards of Conduct	199.	1	2	3	4	5	200.	1	2	3	4	5

What additional areas of instruction do you think need to be added or deleted?

Added:

Delete:

Contracting Training Course Requirements

The following list summarizes the mandatory course requirements in the contracting career field by level as outlined in DoD 5000.52M, *Career Development Program for Acquisition Personnel*. Each training requirement is listed by its primary title as assigned by the Defense Acquisition University with equivalent **DOD course offerings** listed directly below. This list is not intended to be all inclusive. Training requirements may also be met through an equivalent college program or equivalency examination.

Level 1 - Mandatory. Complete two basic courses in contracting. One course in contracting principles and one in contract pricing principles.

Contracting Fundamentals

- Management of Defense Acquisition Contracts-Basic (8D-4320)
- Central Systems Level Contracting (G30BR6531-010)
- Operational Level Contracting
- Construction Contracting Fundamentals (CTC-142)

Contract Pricing

- Principles of Contract Pricing (QMT-170)
- Base Level Pricing (G30ZR6534-009)
- Defense Cost & Price Analysis/Negotiation-PN

Level 2 - Mandatory. Complete three intermediate course. One course in contract law, one course in intermediate contract pricing principles and one intermediate course in your primary assignment.

Government Contract Law

- Government Contract Law (PPM 302)
- Government Contract Law-Construction (CTC-302)
- Government Contract Law (G30ZR6534-007)

Intermediate Contract Pricing (Mandatory 1 Oct 94)

- Intermediate Pricing (QMT-340)

Intermediate Contracting Course by Primary Assignment

- Management of Defense Acquisition Contracts-Advanced (8D-F12)
- Contract Administration-Advanced (PPM 304)
- Base Contract Administration (G3ZAR65170-002)
- Advanced Contract Management-Construction (CTC-542)
- Contract Overhead Management (PPM-355)
- Cost Accounting Standards Workshop (ALMC-CE)
- Defense Contracting for Information Resources

Level 3 - Mandatory. Complete two executive level courses. One course in executive contracting and one executive course in your primary assignment.

Executive Contracting

- Defense Acquisition Contracting Executive Seminar-ER

Executive Contracting Course by Primary Assignment

- Management of Defense Acquisition Contracts-Executive (ALMC-B5)
- Contract Administration-Executive (PPM-057)
- Executive Cost and Price Analysis (QMT-540)

Appendix B: Matrix of Survey Questions Related to Investigative Questions

Table B-1. Matrix of Survey Questions

Investigative Quesion	Survey Question
1	11 - 15, 36 - 42, OE 1 - 4
2	11 - 15, 36 - 42, OE 1 - 4
3	16 - 35, OE 1 - 4
4	43 - 200

Appendix C: Survey Question Statistics

Overall Population and Sample Statistics

Table C-1. Overall Statistics

	Population		Sample	
	Number of Personnel	Population Percentage	Number of Personnel	Sample Percentage
Officer	826	11.81%	67	20.94%
Enlisted	1339	19.15%	77	24.06%
Civilian	4828	69.04%	176	55.00%
Total	6993	100.00%	320	100.00%

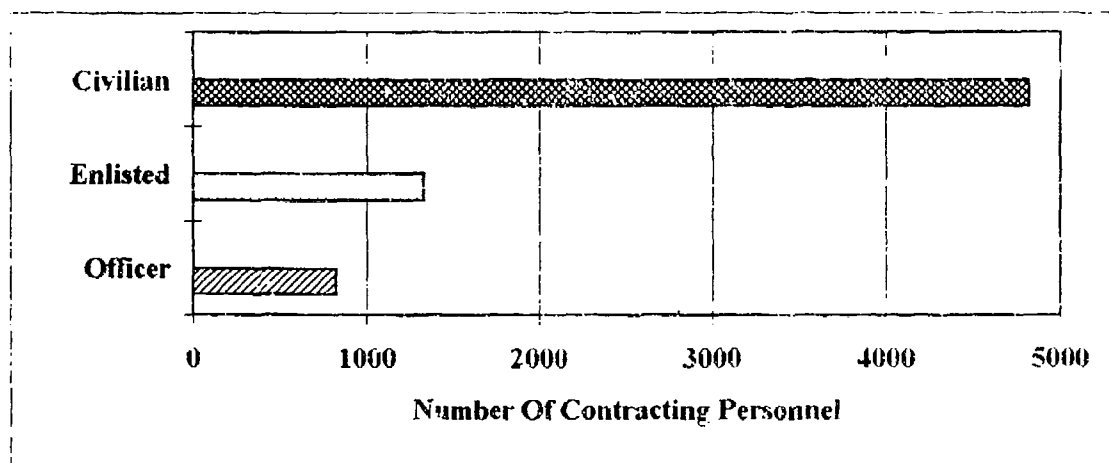


Figure C-1. Population Statistics

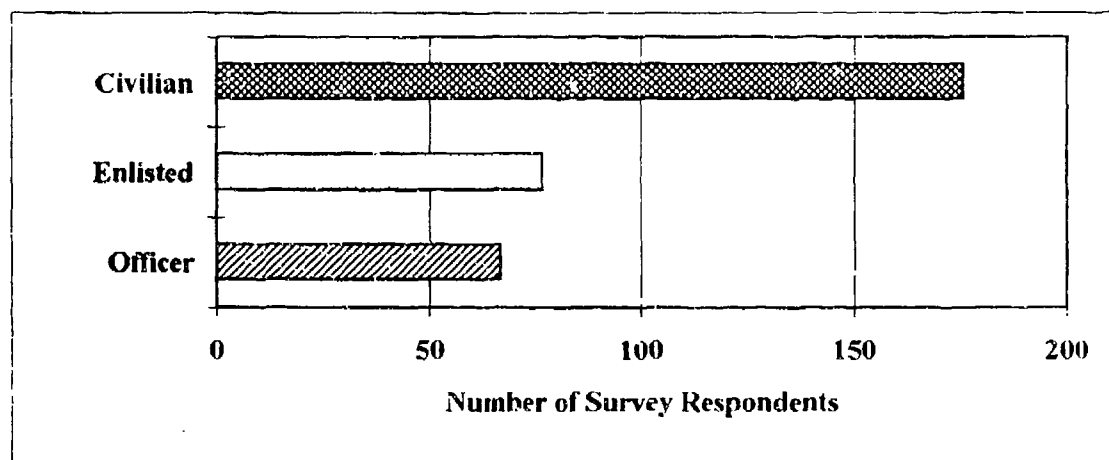


Figure C-2. Sample Statistics

Survey Questions 1, 2, and 3: Current Rank or Grade

Table C-2. Current Rank or Grade

Officer	0-1	0-2	0-3	0-4	0-5	0-6	
	19	6	20	12	7	3	
Enlisted	E-1 to E-3	E-4	E-5	E-6	E-7	E-8	E-9
	6	29	18	14	8	2	0
Civilian	GS-5/GS-7	GS-9	GS-11	GS-12	GS/GS-13	GS/GS-14	GS/GM-15
	26	35	30	47	27	8	3

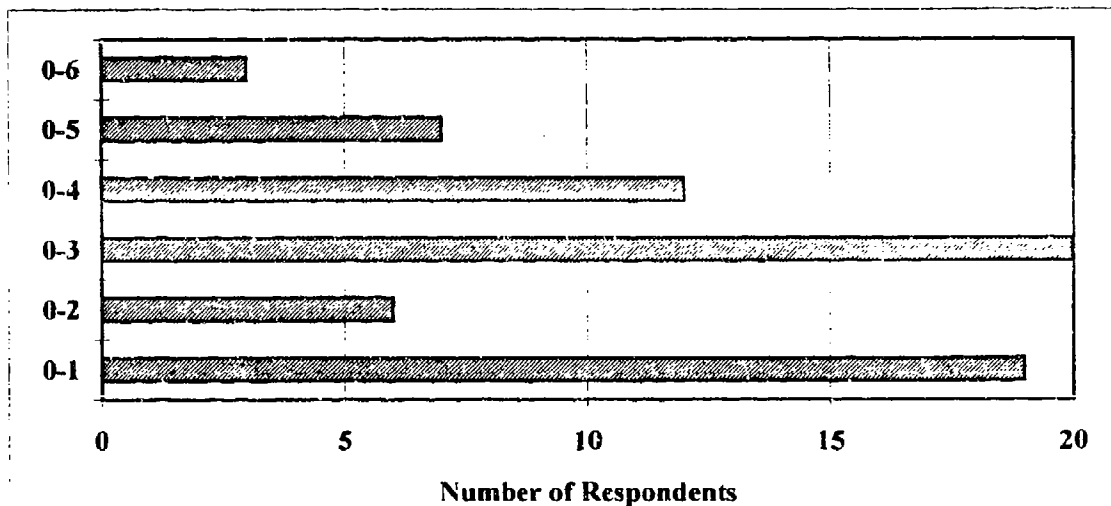


Figure C-3. Number of Officers by Rank

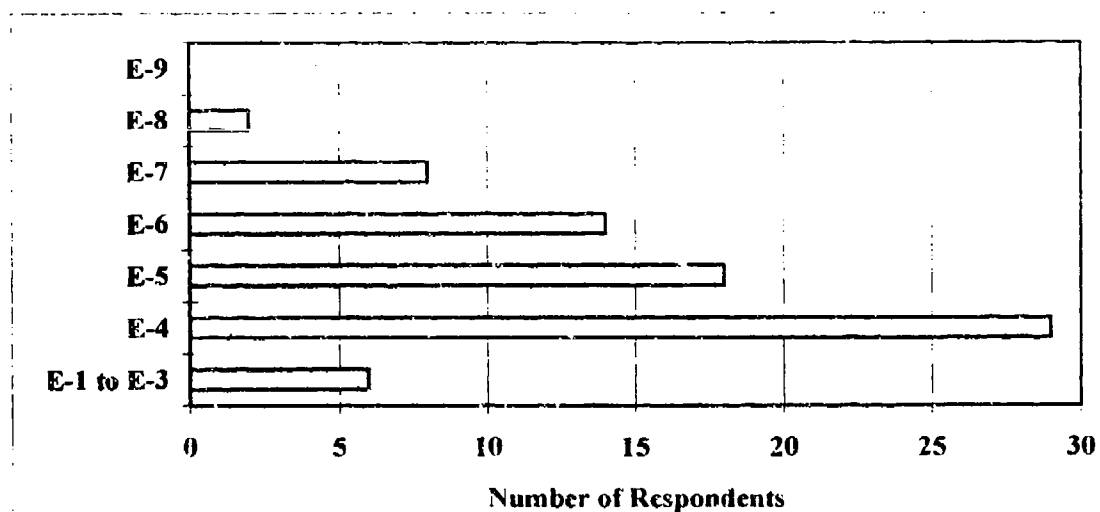


Figure C-4. Number of Enlisted by Rank

Survey Questions 1, 2, and 3: Current Rank or Grade (Continued)

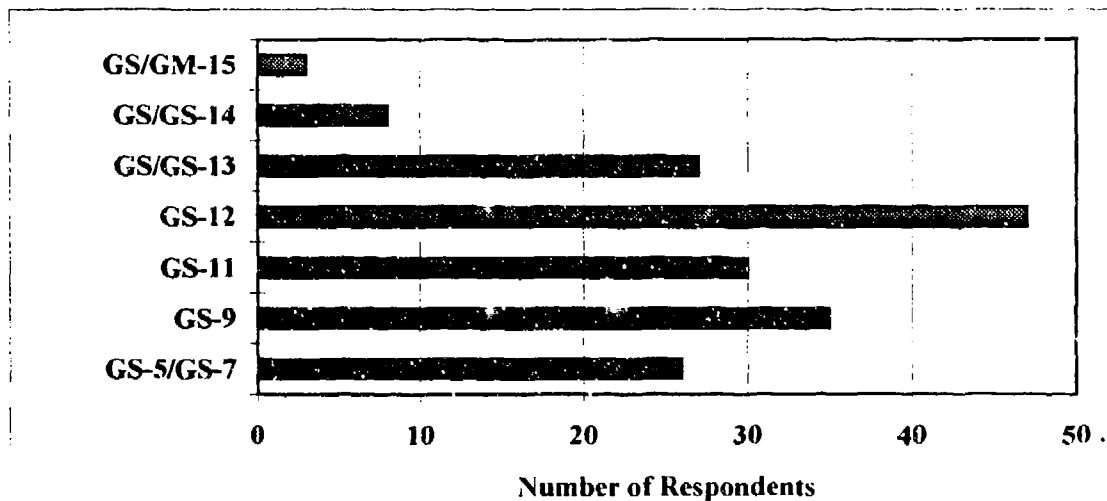


Figure C-5. Number of Civilians by Grade

Survey Question 4: Education

Table C-3. Education Levels by Number of Respondents

	H.S.	H.S. +	Associates	Bachelors	Masters	Masters +	Ph.D.
Officer	0	0	0	27	28	11	0
Enlisted	3	42	20	12	1	0	0
Civilian	6	35	13	74	37	11	0
Total	9	77	33	113	66	22	0

Table C-4. Education Levels by Percentage of Respondents

	H.S.	H.S. +	Associates	Bachelors	Masters	Masters +	Ph.D.
Officer	0.00%	0.00%	0.00%	8.44%	8.75%	3.44%	0.00%
Enlisted	0.94%	13.13%	6.25%	3.75%	0.31%	0.00%	0.00%
Civilian	1.88%	10.94%	4.06%	23.13%	11.56%	3.44%	0.00%
Total	2.81%	24.06%	10.31%	35.31%	20.63%	6.88%	0.00%

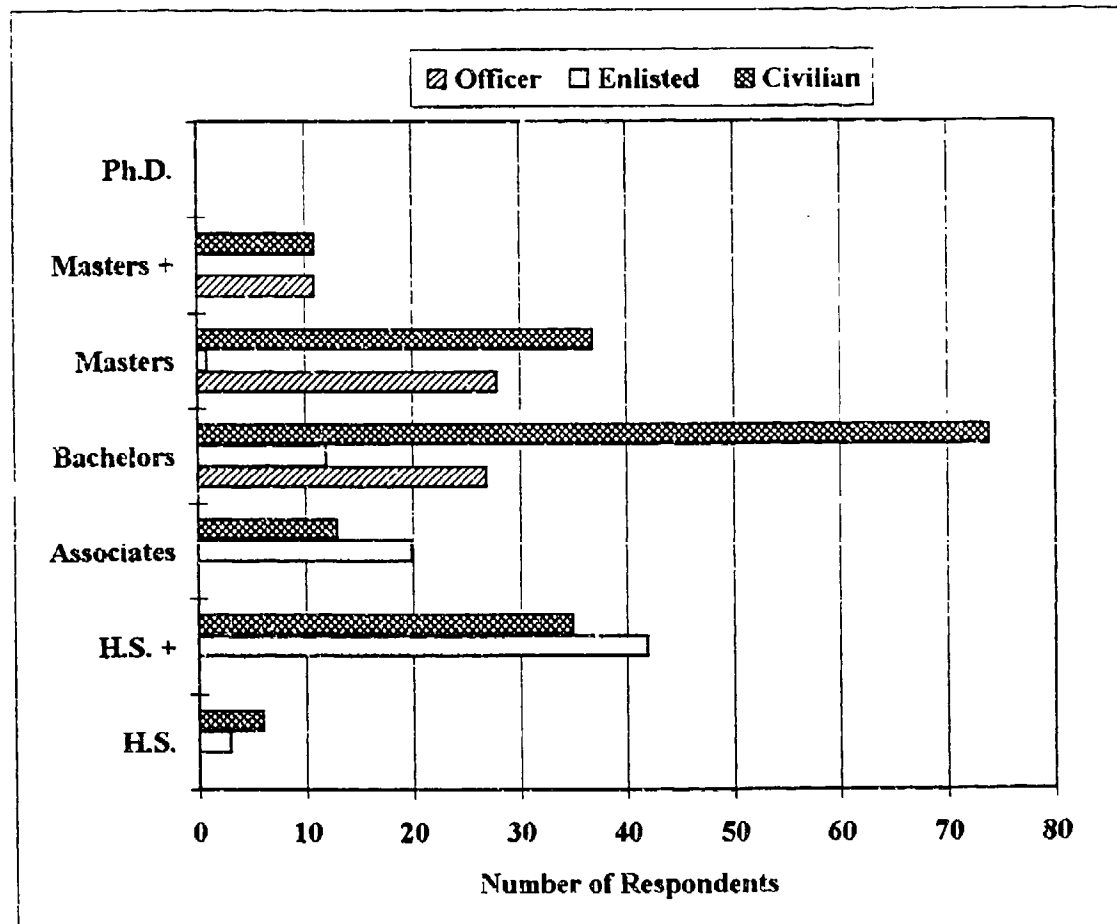


Figure C-6. Education Levels of Respondents

Survey Question 5: Contracting Experience

Table C-5. Contracting Experience by Number of Respondents

	<1 Yr	1-2 Yrs	3-4 Yrs	5-10 Yrs	11-15 Yrs	16-20 Yrs	> 20 Yrs
Officer	16	17	3	22	3	4	2
Enlisted	3	12	24	26	10	2	0
Civilian	2	18	10	70	34	21	21
Total	21	47	37	118	47	27	23

Table C-6. Contracting Experience by Percentage of Respondents

	<1 Yr	1-2 Yrs	3-4 Yrs	5-10 Yrs	11-15 Yrs	16-20 Yrs	> 20 Yrs
Officer	5.00%	5.31%	0.94%	6.88%	0.94%	1.25%	0.63%
Enlisted	0.94%	3.75%	7.50%	8.13%	3.13%	0.63%	0.00%
Civilian	0.63%	5.63%	3.13%	21.88%	10.63%	6.56%	6.56%
Total	6.56%	14.69%	11.56%	36.88%	14.69%	8.44%	7.19%

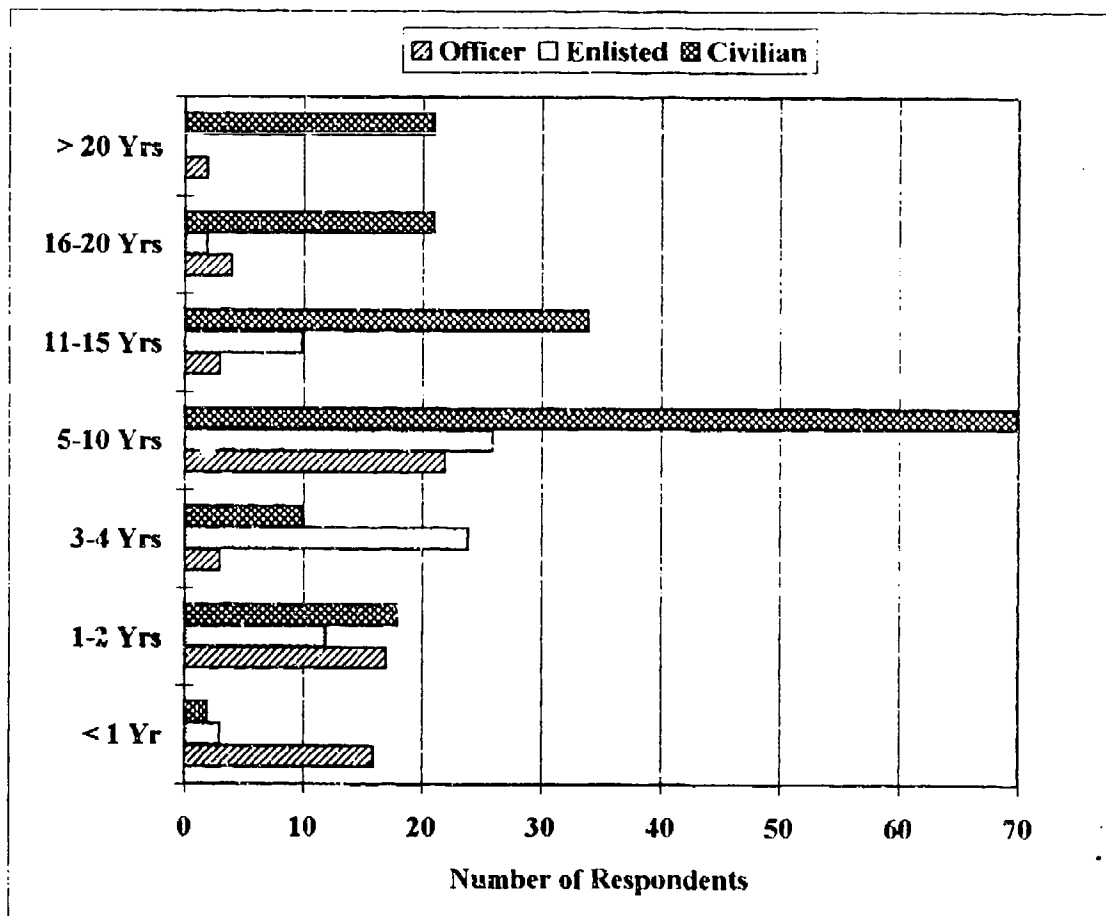


Figure C-7: Contracting Experience Levels of Respondents

Survey Question 6: Supervisory Experience

Table C-7. Supervisory Experience by Number of Respondents

	None	< 1 Yr	1-2 Yrs	3-4 Yrs	5-10 Yrs	11-15 Yrs	> 15 Yrs
Officer	19	5	11	12	12	6	2
Enlisted	45	6	9	3	11	3	0
Civilian	93	13	15	16	23	7	9
Total	157	24	35	31	46	16	11

Table C-8. Supervisory Experience by Percentage of Respondents

	None	< 1 Yr	1-2 Yrs	3-4 Yrs	5-10 Yrs	11-15 Yrs	> 15 Yrs
Officer	5.94%	1.56%	3.44%	3.75%	3.75%	1.88%	0.63%
Enlisted	14.06%	1.88%	2.81%	0.94%	3.44%	0.94%	0.00%
Civilian	29.06%	4.06%	4.69%	5.00%	7.19%	2.19%	2.81%
Total	49.06%	7.50%	10.94%	9.69%	14.38%	5.00%	3.44%

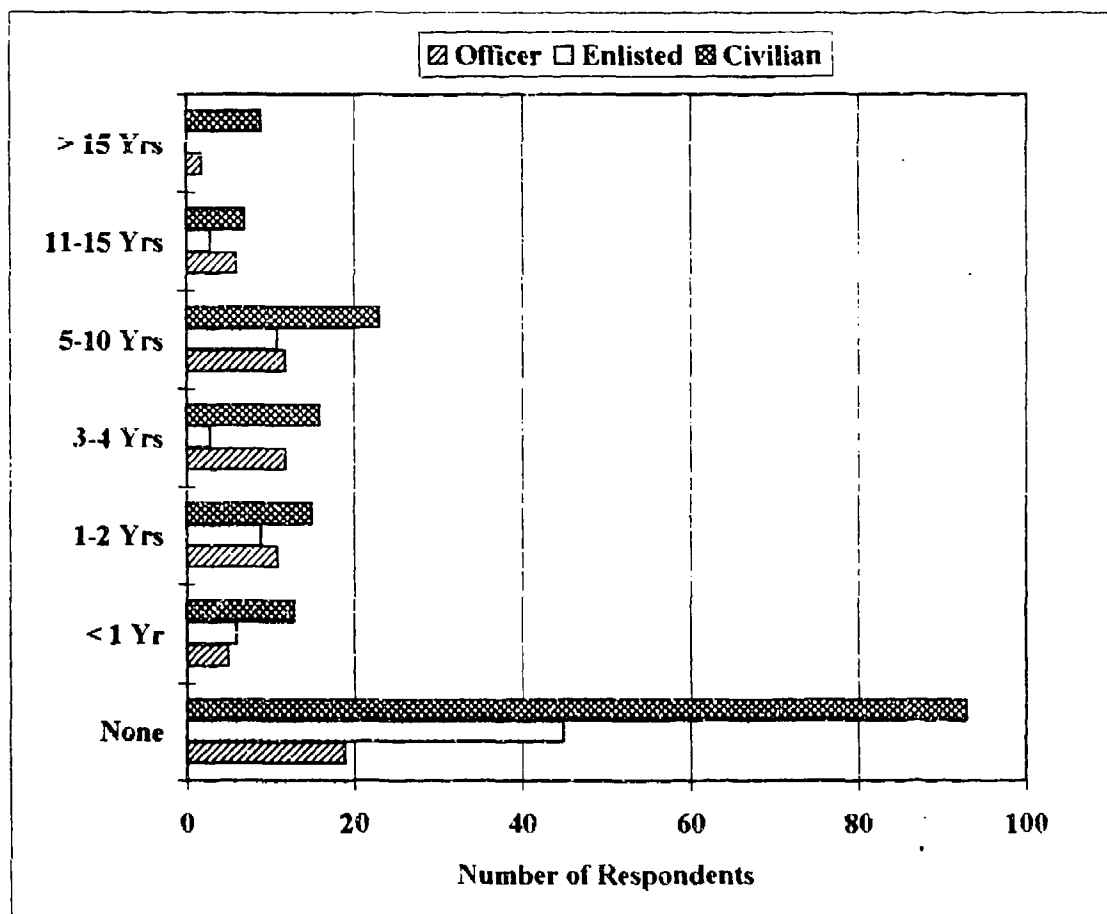


Figure C-8. Supervisory Experience Levels of Respondents

Survey Question 7: Executive/Management Experience

Table C-9. Executive/Management Experience by Number of Respondents

	No Experience	Some Experience
Officer	48	19
Enlisted	74	3
Civilian	162	14
Total	284	36

Table C-10. Executive/Management Experience by Percentage of Respondents

	No Experience	Some Experience
Officer	15.00%	5.94%
Enlisted	23.13%	0.94%
Civilian	50.63%	4.38%
Total	88.75%	11.25%

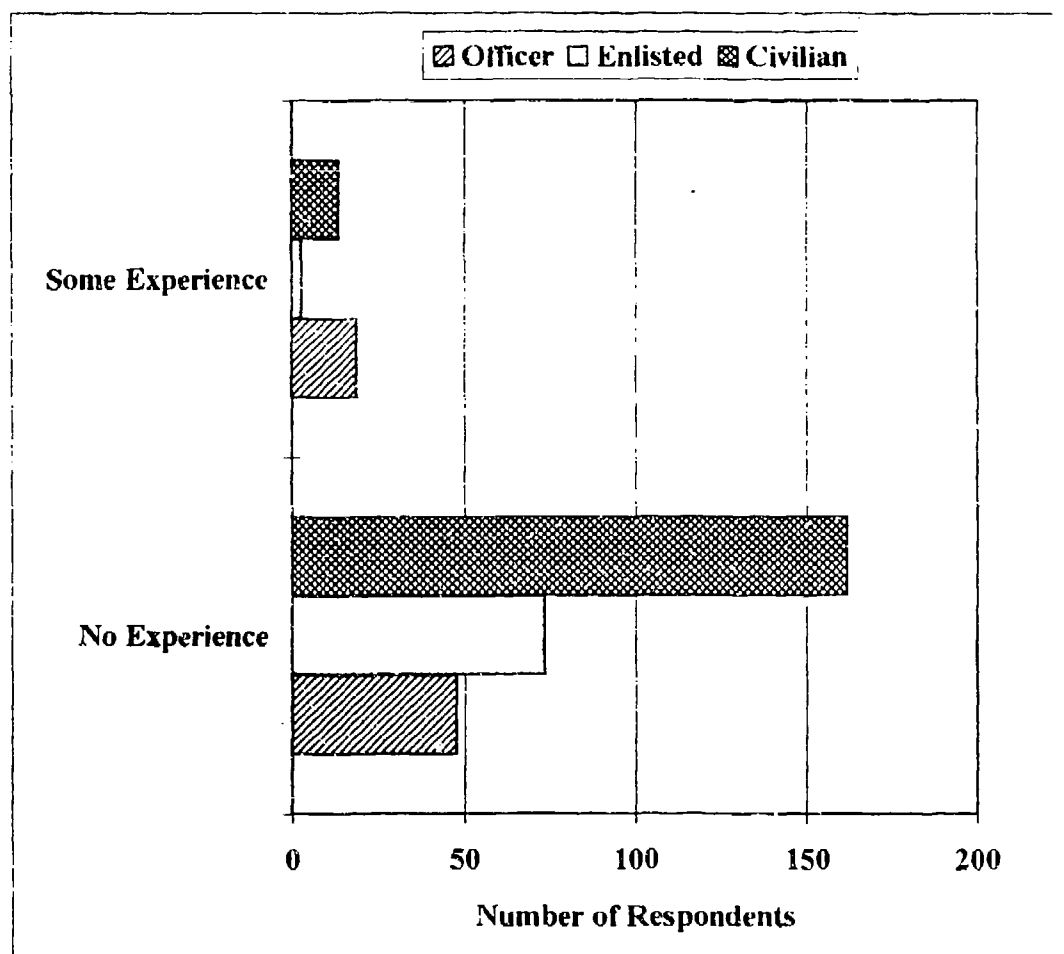


Figure C-9. Executive/Management Experience of Respondents

Survey Question 8: Present Job Title

Table C-11. Job Titles by Number of Respondents

	Negotiator	Specialist	Administrator	Analyst	Cost/Price	CO	Other
Officer	7	14	7	0	0	9	30
Enlisted	1	39	17	0	0	12	8
Civilian	16	68	23	14	15	31	9
Total	24	121	47	14	15	52	47

Table C-12. Job Titles by Percentage of Respondents

	Negotiator	Specialist	Administrator	Analyst	Cost/Price	CO	Other
Officer	2.19%	4.38%	2.19%	0.00%	0.00%	2.81%	9.38%
Enlisted	0.31%	12.19%	5.31%	0.00%	0.00%	3.75%	2.50%
Civilian	5.00%	21.25%	7.19%	4.38%	4.69%	9.69%	2.81%
Total	7.50%	37.81%	14.69%	4.38%	4.69%	16.25%	14.69%

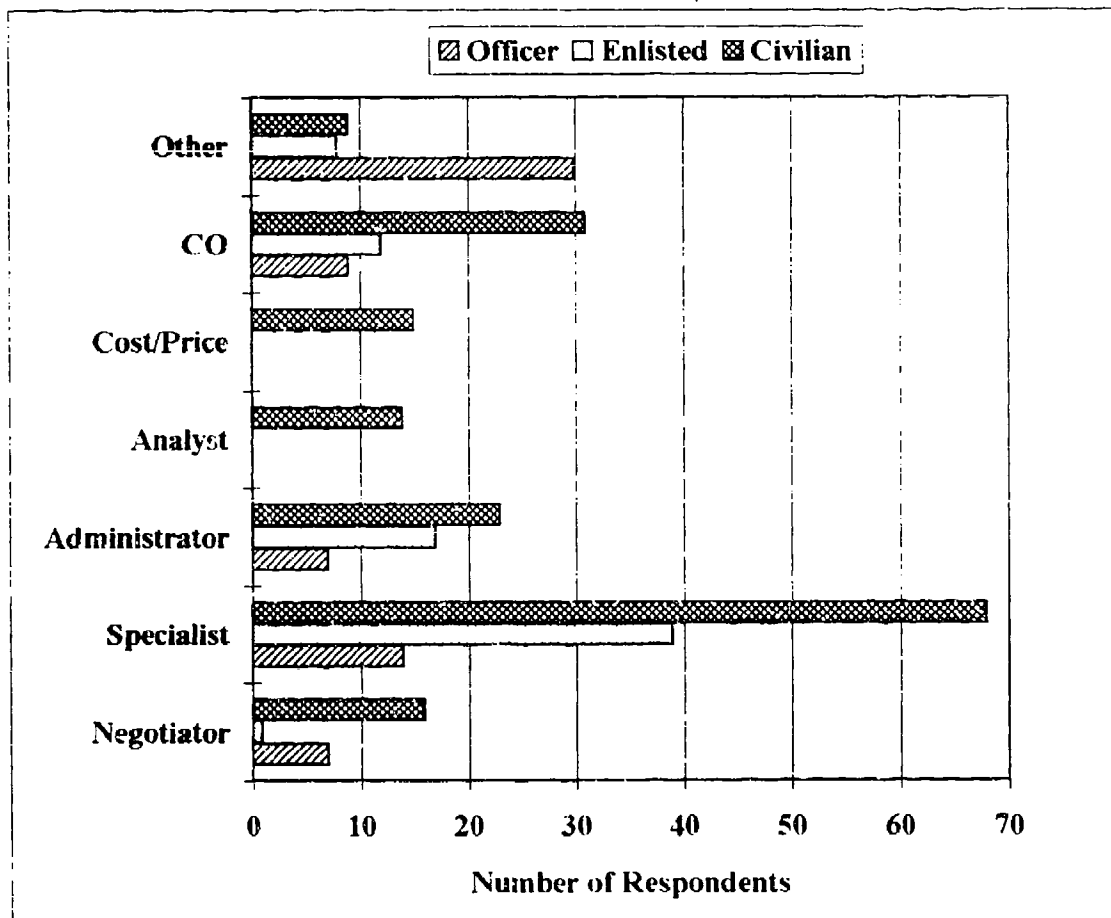


Figure C-10. Job Titles of Respondents

Survey Question 9: Contracting Certification

Table C-13. Certification Levels by Number of Respondents

	Level 0	Level I	Level II	Level III
Officer	21	13	22	11
Enlisted	29	24	24	0
Civilian	33	18	97	28
Total	83	55	143	39

Table C-14. Certification Levels by Percentage of Respondents

	Level 0	Level I	Level II	Level III
Officer	6.56%	4.06%	6.88%	3.44%
Enlisted	9.06%	7.50%	7.50%	0.00%
Civilian	10.31%	5.63%	30.31%	8.75%
Total	25.94%	17.19%	44.69%	12.19%

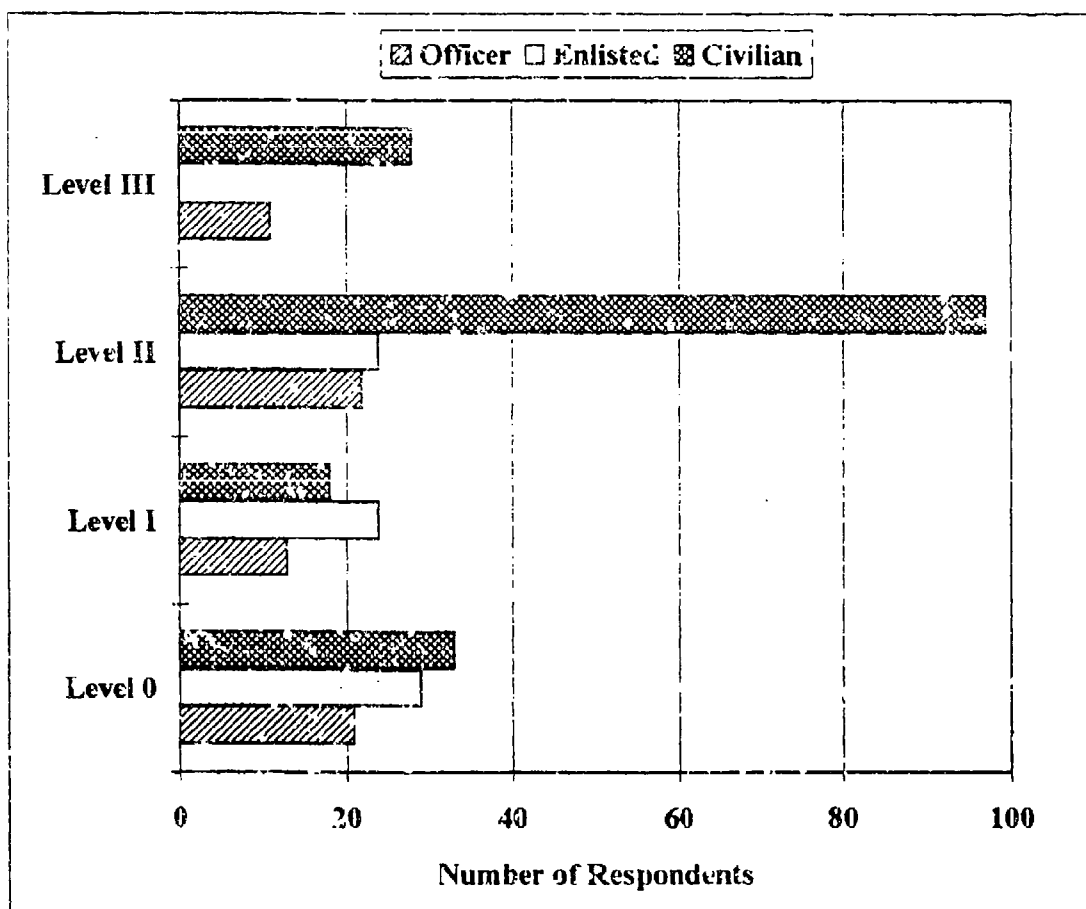


Figure C-11. Certification Level of Respondents

Survey Question 10: Type of Contracting Function Assigned To

Table C-15. Contracting Function by Number of Respondents

	Systems	Operational	Specialized	Headquarters	CAO	Training	Other
Officer	10	28	7	8	6	3	5
Enlisted	0	62	3	0	2	8	2
Civilian	30	79	27	12	13	2	13
Total	40	169	37	20	21	13	20

Table C-16. Contracting Function by Percentage of Respondents

	Systems	Operational	Specialized	Headquarters	CAO	Training	Other
Officer	3.13%	8.75%	2.19%	2.50%	1.88%	0.94%	1.56%
Enlisted	0.00%	19.38%	0.94%	0.00%	0.63%	2.50%	0.63%
Civilian	9.38%	24.69%	8.44%	3.75%	4.06%	0.63%	4.06%
Total	12.50%	52.81%	11.56%	6.25%	6.56%	4.06%	6.25%

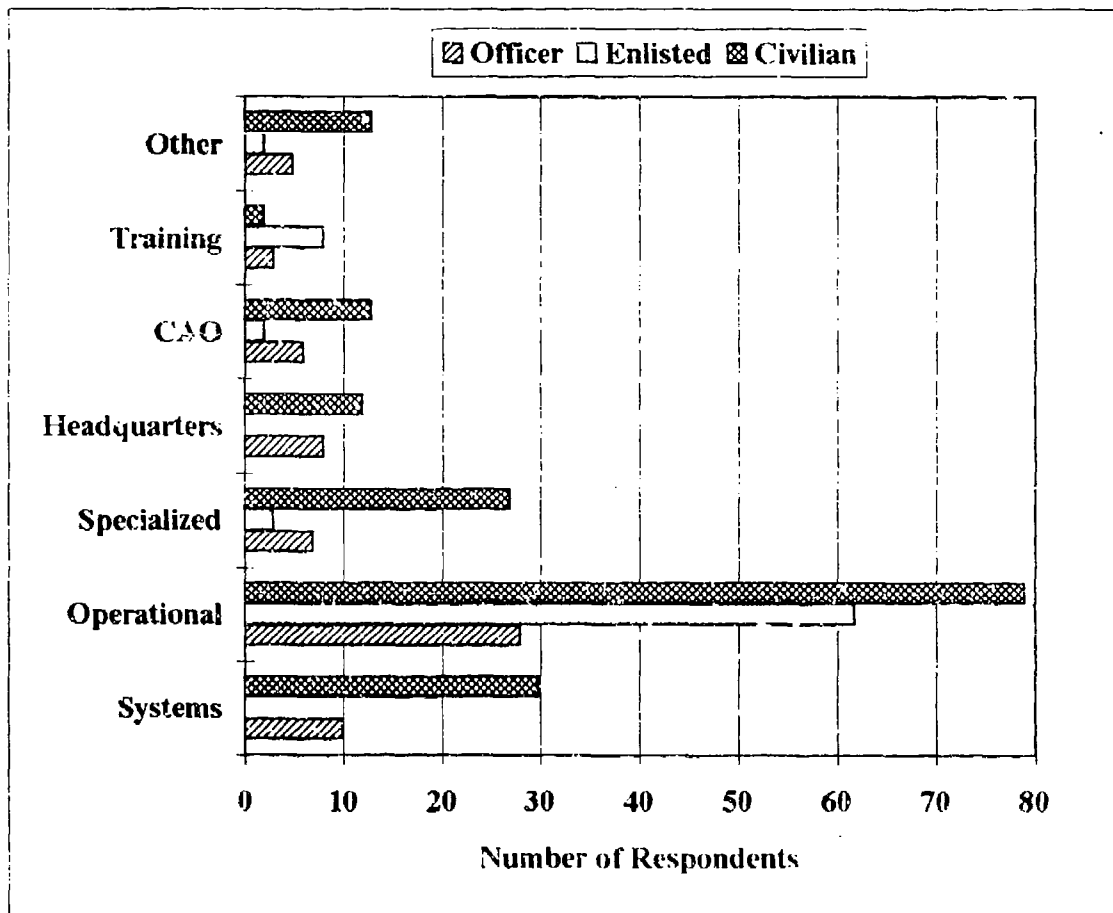


Figure C-12. Contracting Function: Type of Respondents

Survey Question 11: Sufficiency of Certification Program Requirements

Table C-17. Sufficiency of Program Requirements by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	5	17	24	78	14
Level II	4	28	30	67	14
Level III	2	16	3	15	3
Total	11	61	57	160	31

Table C-18. Sufficiency of Program Requirements by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.55%	5.31%	7.50%	24.38%	4.38%
Level II	1.25%	8.75%	9.38%	20.94%	4.38%
Level III	0.63%	5.00%	0.94%	4.69%	0.94%
Total	3.44%	19.06%	17.81%	50.00%	9.69%

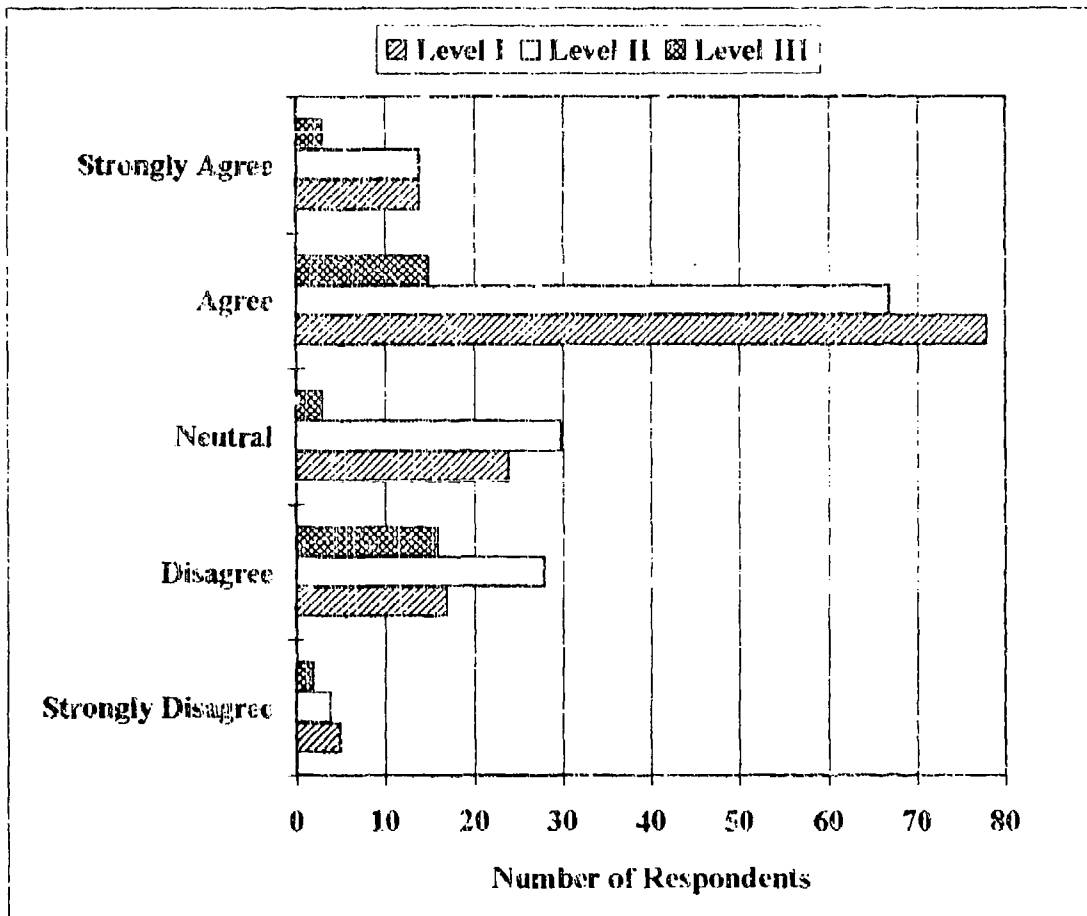


Figure C-13. Sufficiency of Program Requirements by Certification Levels

Survey Question 12: Sufficiency of Experience Requirement

Table C-19. Sufficiency of Experience Requirement by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	6	28	33	62	9
Level II	9	40	24	57	13
Level III	7	20	4	7	1
Total	22	88	61	126	23

Table C-20. Sufficiency of Experience Requirement by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.88%	8.75%	10.31%	19.38%	2.81%
Level II	2.81%	12.50%	7.50%	17.81%	4.06%
Level III	2.19%	6.25%	1.25%	2.19%	0.31%
Total	6.88%	27.50%	19.06%	39.38%	7.10%

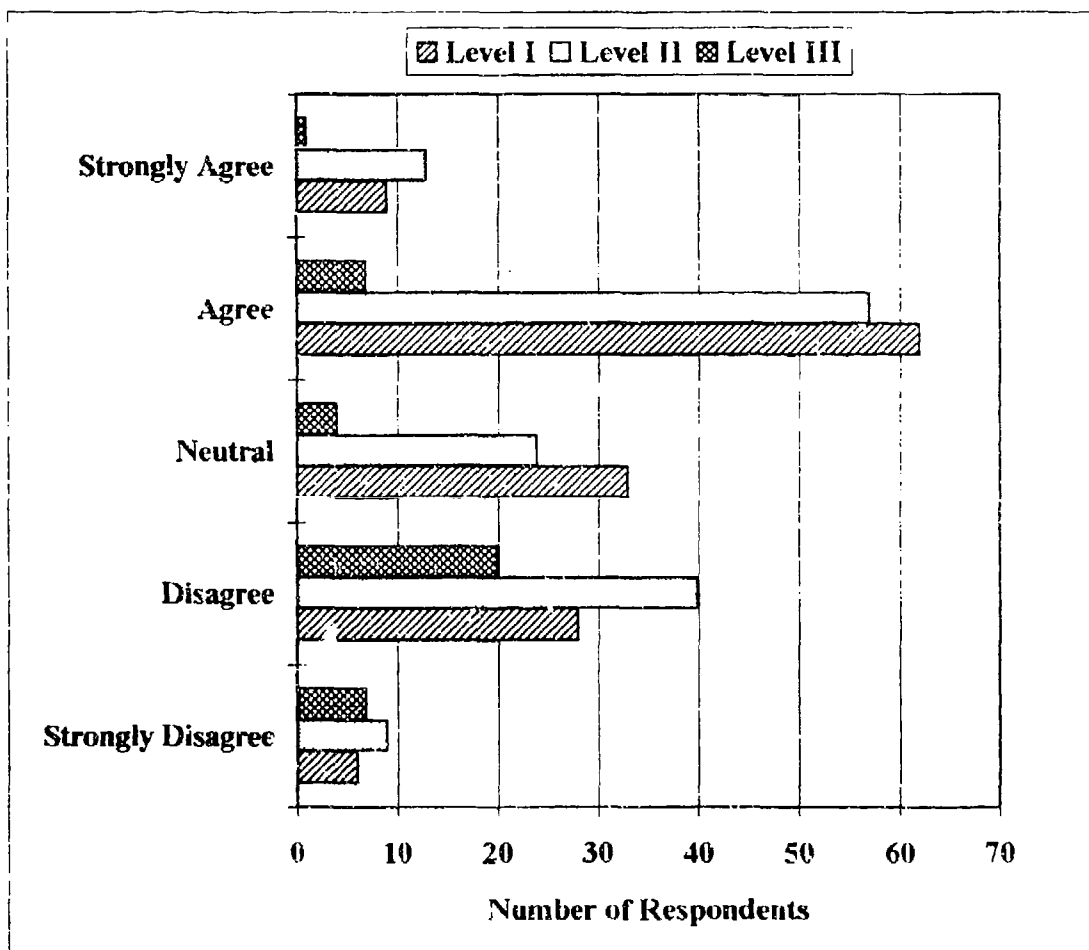


Figure C-14. Sufficiency of Experience Requirements by Certification Levels

Survey Question 13: Sufficiency of Training Requirement

Table C-21. Sufficiency of Training Requirement by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	5	22	34	68	9
Level II	3	29	28	70	13
Level III	1	10	5	23	0
Total	9	61	67	161	22

Table C-22. Sufficiency of Training Requirement by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.56%	6.88%	10.63%	21.25%	2.81%
Level II	0.94%	9.06%	8.75%	21.88%	4.06%
Level III	0.31%	3.13%	1.56%	7.19%	0.00%
Total	2.81%	19.06%	20.94%	50.31%	6.88%

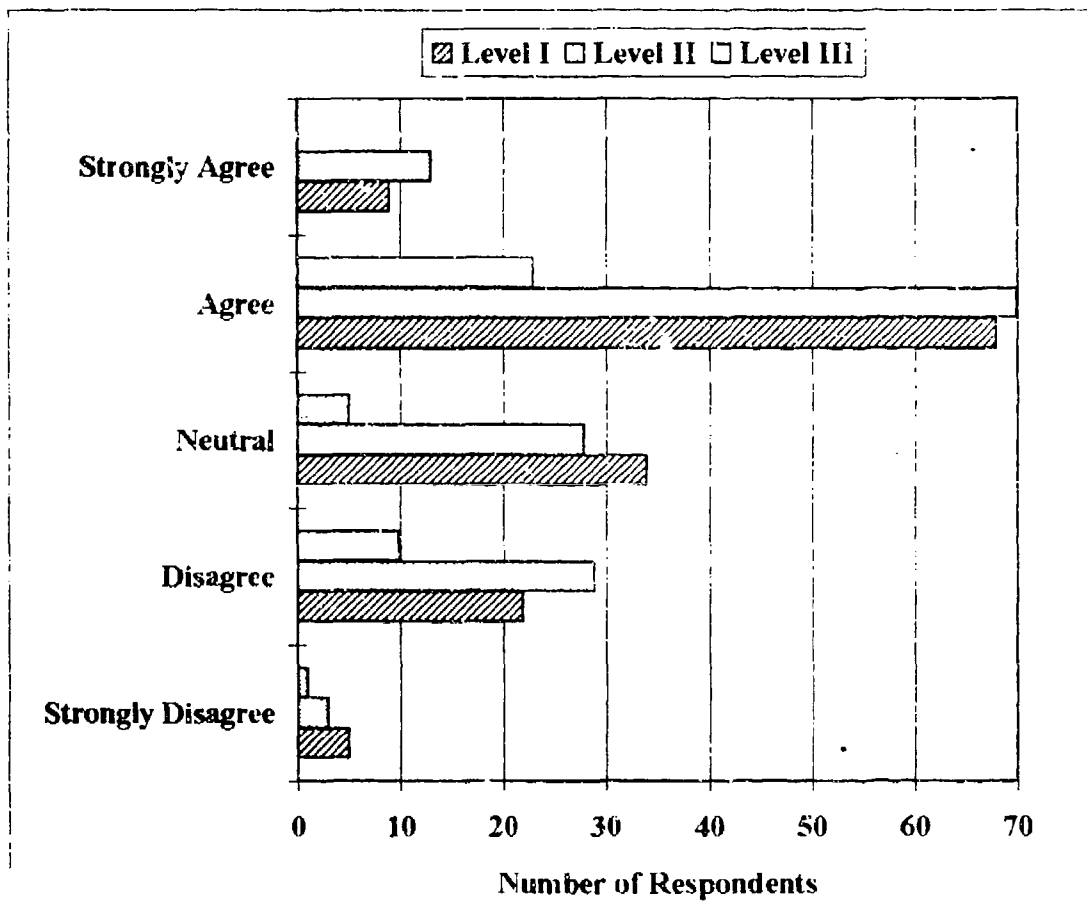


Figure C-15. Sufficiency of Training Requirements by Certification Levels

Survey Question 14: Sufficiency of Education Requirement

Table C-23. Sufficiency of Education Requirement by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	9	20	32	63	14
Level II	7	26	26	65	19
Level III	4	7	2	25	1
Total	20	53	60	153	34

Table C-24. Sufficiency of Education Requirement by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	2.81%	6.25%	10.00%	19.69%	4.38%
Level II	2.19%	8.13%	8.13%	20.31%	5.94%
Level III	1.25%	2.19%	0.63%	7.81%	0.31%
Total	6.25%	16.56%	18.75%	47.81%	10.63%

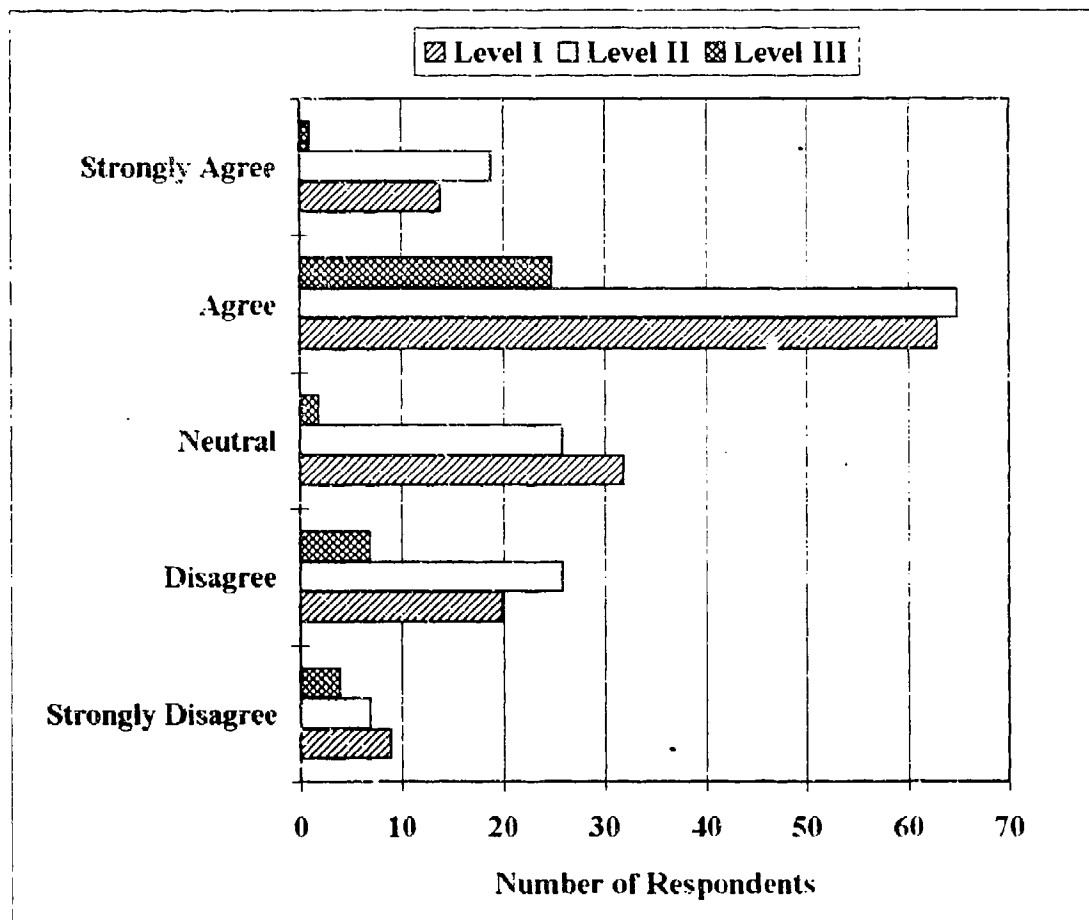


Figure C-16. Sufficiency of Education Requirements by Certification Levels

Survey Question 15: Most Important Certification Requirement

Table C-25. Most Important Requirement by Number of Respondents

	Experience	Education	Training
Level I	69	56	9
Level II	81	43	15
Level III	28	8	3
Total	178	107	27

Table C-26. Most Important Requirement by Percentage of Respondents

	Experience	Education	Training
Level I	22.04%	17.89%	2.88%
Level II	25.88%	13.74%	4.79%
Level III	8.95%	2.56%	0.96%
Total	56.87%	34.10%	8.63%

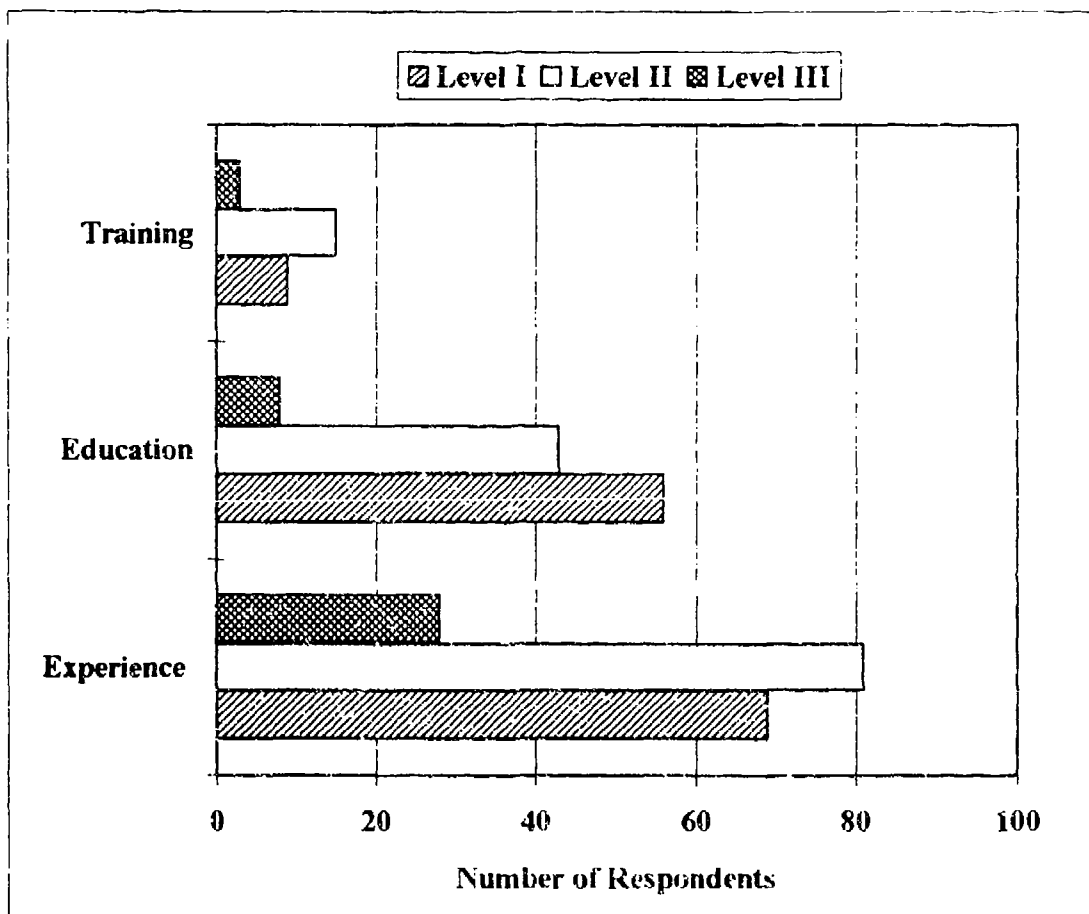


Figure C-17. Most Important Certification Requirement by Certification Levels

Table C-27. Survey Question 16 to 33: Adequacy of Current DOD Training Courses - All Respondents

Course Evaluation by All Respondents	Question Number	Attendance					Attendance - Weighted					Percent Adequate					Ranking - Weighted				
		1	2	3	4	5	Highly Inadequate	Inadequate	Borderline	Adequate	Highly Adequate	4+5	1	2	3	4	5	4+5			
Government Contract Law	23	262	0	4	21	123	114	90.46%	0.150	0.000	0.599	3	146	18.425	17.077	35.503					
MIDAC Basic	16	224	1	6	24	117	76	86.16%	0.128	0.128	0.768	3	074	14.985	9.734	24.718					
Principles of Contract Pricing	20	172	3	5	15	89	60	86.63%	0.098	0.295	0.492	1	475	8.752	5.901	14.653					
MIDAC Advanced	25	165	0	1	13	78	73	91.52%	0.094	0.000	0.094	1	226	7.358	6.887	14.245					
Defense Cost and Price Analysis/Negotiation	22	137	1	5	9	75	47	89.05%	0.078	0.078	0.392	0	705	5.875	3.682	9.556					
Advanced Contract Administration	26	131	0	2	13	55	61	88.55%	0.075	0.000	0.150	0	974	4.119	4.569	8.688					
Base Contract Administration	27	112	0	4	9	57	42	88.30%	0.064	0.000	0.256	0	576	3.650	2.690	6.340					
Base Level Pricing	21	111	3	4	8	61	35	86.40%	0.063	0.190	0.254	0	508	3.871	2.221	6.093					
Operational Level Contracting	18	102	0	4	11	58	29	85.20%	0.058	0.000	0.233	0	642	3.383	1.691	5.074					
Central Systems Level Contracting	17	63	1	5	7	28	22	79.37%	0.036	0.036	0.180	0	252	1.009	0.792	1.801					
Intermediate Pricing	24	55	1	1	7	25	21	83.64%	0.031	0.031	0.031	0	220	0.786	0.660	1.447					
Executive Contracting	32	47	0	2	2	20	23	91.40%	0.027	0.000	0.054	0	054	0.537	0.618	1.156					
Executive Contract Administration	34	44	0	3	3	16	22	86.36%	0.025	0.000	0.075	0	075	0.403	0.553	0.956					
MIDAC Executive	33	41	0	3	4	17	17	82.93%	0.023	0.000	0.070	0	094	0.399	0.399	0.797					
Defense Contracting for Information Resources	31	21	0	1	5	5	10	71.43%	0.012	0.000	0.012	0	060	0.060	0.120	0.180					
Cost Accounting Standards Workshop	30	16	0	1	0	3	12	93.75%	0.009	0.000	0.009	0	000	0.027	0.110	0.137					
Executive Cost and Price Analysis	35	14	0	2	2	5	5	71.43%	0.008	0.000	0.016	0	016	0.040	0.040	0.080					
Overhead Contract Overhead Management	28	14	0	2	3	1	8	64.20%	0.008	0.000	0.016	0	024	0.008	0.064	0.072					
Construction Contracting Fundamentals	19	13	2	0	2	6	3	69.23%	0.007	0.015	0.000	0	015	0.045	0.022	0.067					
Advanced Contract Management - Construction	28	5	0	0	0	1	4	100.00%	0.003	0.000	0.000	0	000	0.003	0.011	0.014					
TOTAL		1740	12	55	158	840	684	87.14%	1												

Table C-28. Survey Question 16 to 35: Adequacy of Current DOD Training Courses - Level I Respondents

Course Evaluation by Level I Respondents	Question Number	Attendance					Highly Inadequate					Inadequate					Borderline					Adequate					Highly Adequate					Ranking - Weighted
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Government Contract Law	23	93	0	3	9	47	34	87	10%	0.218	0.000	0.653	1.960	10.237	7.405	17.642																
MIDAC Basic	16	76	0	4	11	39	22	80	26%	0.178	0.000	0.712	1.958	6.941	3.916	10.857																
Base Level Pricing	21	50	1	2	2	27	18	90	00%	0.117	0.117	0.234	0.234	3.162	2.108	5.269																
Base Contract Administration	27	41	0	3	3	23	12	85	37%	0.096	0.000	0.288	0.288	2.208	1.152	3.361																
Operational Level Contracting	18	41	0	3	5	23	10	80	49%	0.096	0.000	0.288	0.480	2.208	0.960	3.169																
Principles of Contract Pricing	20	31	0	1	3	15	12	87	16%	0.073	0.000	0.073	0.218	1.089	0.871	1.960																
MIDAC Advanced	25	24	0	0	2	12	10	91	67%	0.056	0.000	0.000	0.112	0.674	0.562	1.237																
Central Systems Level Contracting	17	18	0	1	3	9	5	77	78%	0.042	0.000	0.042	0.126	0.379	0.211	0.590																
Defense Cost and Price Analysis/Negotiation	22	14	0	1	2	8	3	78	57%	0.033	0.000	0.033	0.066	0.262	0.098	0.361																
Advanced Contract Administration	26	14	0	0	4	5	5	71	43%	0.033	0.000	0.000	0.131	0.164	0.164	0.328																
Intermediate Pricing	24	8	0	0	1	4	3	87	50%	0.019	0.000	0.000	0.019	0.075	0.056	0.131																
Construction Contracting Fundamentals	19	3	0	0	1	2	0	66	67%	0.007	0.000	0.000	0.007	0.014	0.000	0.014																
Advanced Contract Management - Construction	28	2	0	0	0	0	2	100	00%	0.005	0.000	0.000	0.000	0.000	0.009	0.009																
Overhead Contract Overhead Management	28	2	0	0	1	0	1	50	00%	0.005	0.000	0.000	0.005	0.000	0.005	0.005																
Defense Contracting for Information Resources	31	2	0	0	1	0	1	50	00%	0.005	0.000	0.000	0.005	0.000	0.005	0.005																
Executive Contracting	32	2	0	1	0	0	1	50	00%	0.005	0.000	0.000	0.000	0.000	0.005	0.005																
Executive Contract Administration	34	2	0	0	1	0	1	50	00%	0.005	0.000	0.000	0.000	0.000	0.005	0.005																
Executive Cost and Price Analysis	35	2	0	0	1	0	1	50	00%	0.005	0.000	0.000	0.000	0.000	0.005	0.005																
Cost Accounting Standards Workshop	30	1	0	0	0	0	1	100	00%	0.002	0.000	0.000	0.000	0.000	0.002	0.002																
MIDAC Executive	33	1	0	0	0	0	1	100	00%	0.002	0.000	0.000	0.000	0.000	0.002	0.002																
TOTAL		427	1	19	50	214	143	83	61%	1																						

Table C-30. Survey Question 16 to 35: Adequacy of Current DOD Training Courses - Level III Respondents

Course Evaluation by Level III Respondents	Question Number	Attendance					Attendance - Weighted					Percent Adequate					Highly Inadequate					Borderline					Adequate					Highly Adequate					Ranking - Weighted
		1	2	3	4	5	1	2	3	4	5	4+5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5					
MIDAC Basic	16	40	1	0	4	18	17	87.50%	0.109	0.109	0.000	0.000	0.000	0.436	1.962	1.853	3.815																				
MIDAC Advanced	25	37	0	1	2	17	17	91.89%	0.101	0.000	0.101	0.000	0.101	0.202	1.714	1.714	3.428																				
Principles of Contract Pricing	20	36	0	1	1	21	13	94.44%	0.098	0.000	0.098	0.000	0.098	0.098	2.060	1.275	3.335																				
Government Contract Law	23	36	0	0	3	14	19	91.67%	0.098	0.000	0.000	0.000	0.000	0.294	1.373	1.864	3.237																				
Defense Cost and Price Analysis/Negotiation	22	32	0	1	2	15	14	90.63%	0.087	0.000	0.087	0.000	0.087	0.174	1.308	1.221	2.529																				
Executive Contracting	32	30	0	1	1	15	13	93.33%	0.082	0.000	0.082	0.000	0.082	0.082	1.226	1.063	2.289																				
Advanced Contract Administration	26	27	0	2	2	8	15	85.19%	0.074	0.000	0.147	0.000	0.147	0.147	0.589	1.104	1.692																				
MIDAC Executive	33	26	0	3	2	11	10	80.77%	0.071	0.000	0.213	0.000	0.213	0.142	0.779	0.708	1.488																				
Executive Contract Administration	34	23	0	3	1	8	11	82.61%	0.063	0.000	0.188	0.000	0.188	0.063	0.501	0.689	1.191																				
Central Systems Level Contracting	17	14	0	1	0	6	7	92.86%	0.038	0.000	0.038	0.000	0.038	0.000	0.229	0.267	0.496																				
Base Contract Administration	27	12	0	1	0	7	4	91.67%	0.033	0.000	0.033	0.000	0.033	0.000	0.229	0.131	0.360																				
Base Level Pricing	21	12	0	0	2	7	3	83.33%	0.033	0.000	0.000	0.000	0.000	0.065	0.229	0.098	0.327																				
Operational Level Contracting	18	12	0	1	1	5	5	83.33%	0.033	0.000	0.033	0.000	0.033	0.033	0.163	0.163	0.327																				
Intermediate Pricing	24	10	0	0	2	5	3	80.00%	0.027	0.000	0.000	0.000	0.000	0.054	0.136	0.082	0.218																				
Defense Contracting for Information Resources	31	8	0	1	1	2	4	75.00%	0.022	0.000	0.022	0.000	0.022	0.022	0.044	0.087	0.131																				
Cost Accounting Standards Workshop	30	3	0	0	0	2	1	100.00%	0.008	0.000	0.000	0.000	0.000	0.000	0.016	0.008	0.025																				
Executive Cost and Price Analysis	35	4	0	2	0	1	1	50.00%	0.011	0.000	0.022	0.000	0.022	0.000	0.011	0.011	0.022																				
Construction Contracting Fundamentals	19	2	0	0	0	0	2	100.00%	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.011																				
Overhead Contract Overhead Management	28	2	0	0	0	1	1	100.00%	0.005	0.000	0.000	0.000	0.000	0.000	0.005	0.005	0.011																				
Advanced Contract Management - Construction	28	1	0	0	0	0	1	100.00%	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.003																				
TOTAL		367	1	18	24	163	161	88.28%	1																												

Survey Question 36: Training Program is Intended to Familiarize

Table C-31. Training Program Familiarization by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	2	2	11	91	30
Level II	1	3	14	93	29
Level III	1	0	1	31	6
Total	4	5	26	215	65

Table C-32. Training Program Familiarization by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.63%	0.63%	3.49%	28.89%	9.52%
Level II	0.32%	0.95%	4.44%	29.52%	9.21%
Level III	0.32%	0.00%	0.32%	9.84%	1.90%
Total	1.27%	1.59%	8.25%	68.25%	20.63%

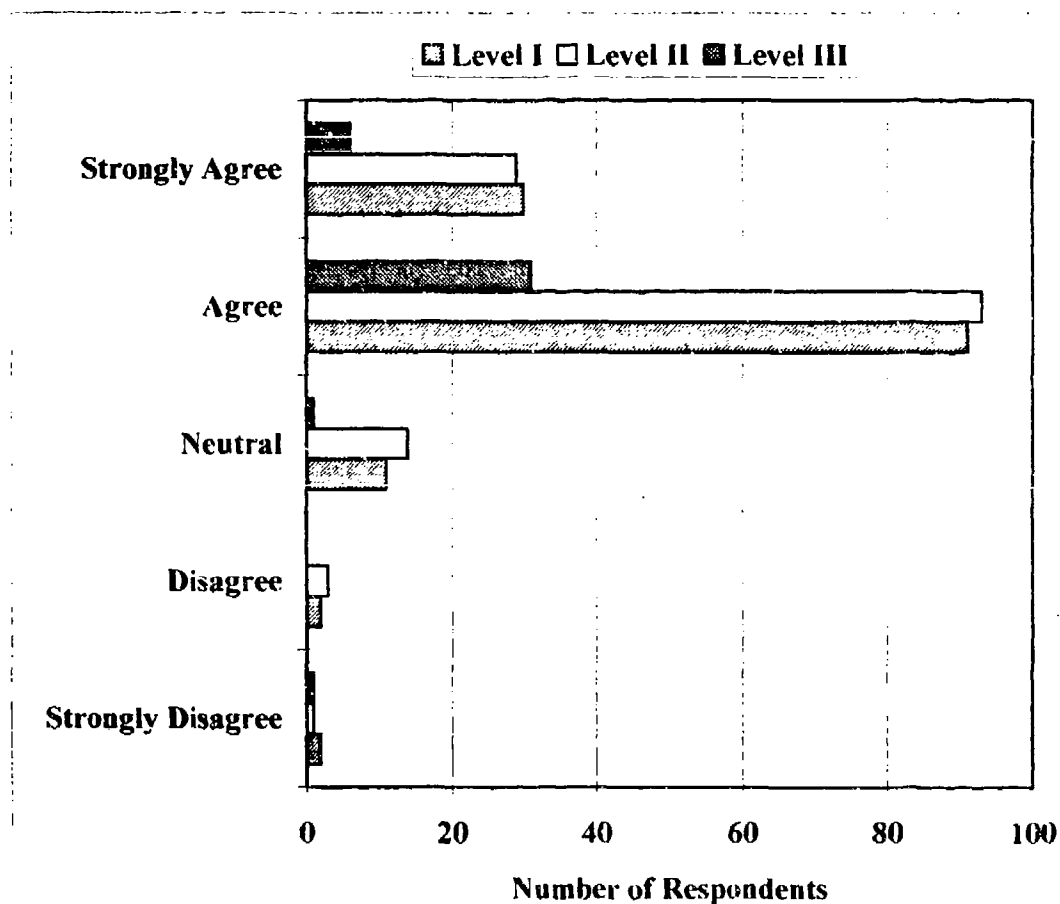


Figure C-18. Training Familiarization by Certification Levels

Survey Question 37: Training Program is Beneficial to Ability to Perform Job

Table C-33. Program Beneficial to Performance by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0	8	21	82	27
Level II	1	7	30	76	26
Level III	1	2	6	24	6
Total	2	17	57	182	59

Table C-34. Program Beneficial to Performance by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.00%	2.52%	6.62%	25.87%	8.52%
Level II	0.32%	2.21%	9.46%	23.97%	8.20%
Level III	0.32%	0.63%	1.89%	7.57%	1.89%
Total	0.63%	5.36%	17.98%	57.41%	18.61%

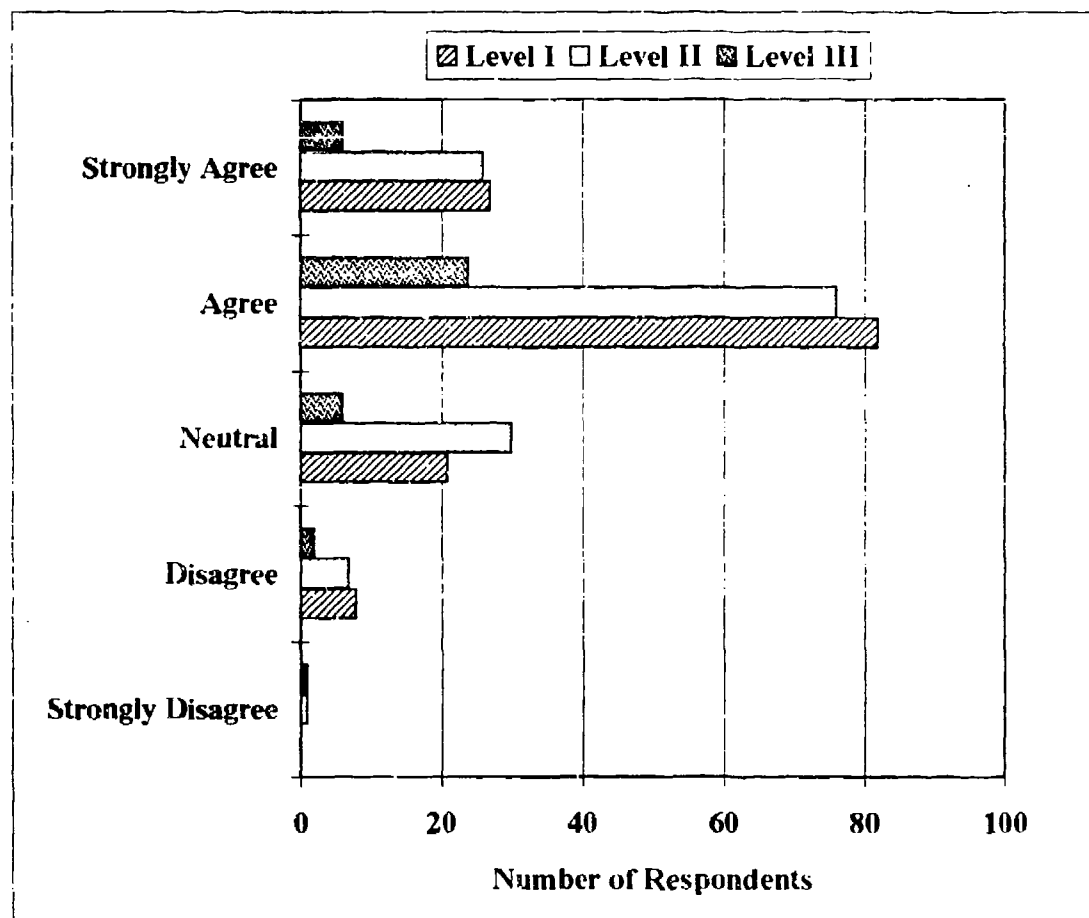


Figure C-19. Program is Beneficial to Performance by Certification Levels

Survey Question 38: Training Program is Specific Enough

Table C-35. Training Program is Specific Enough by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	2	22	41	61	12
Level II	3	27	33	63	14
Level III	1	7	8	20	3
Total	6	56	82	144	29

Table C-36. Training Program is Specific Enough by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.63%	6.94%	12.93%	19.24%	3.79%
Level II	0.95%	8.52%	10.41%	19.87%	4.42%
Level III	0.32%	2.21%	2.52%	6.31%	0.95%
Total	1.89%	17.67%	25.87%	45.43%	9.15%

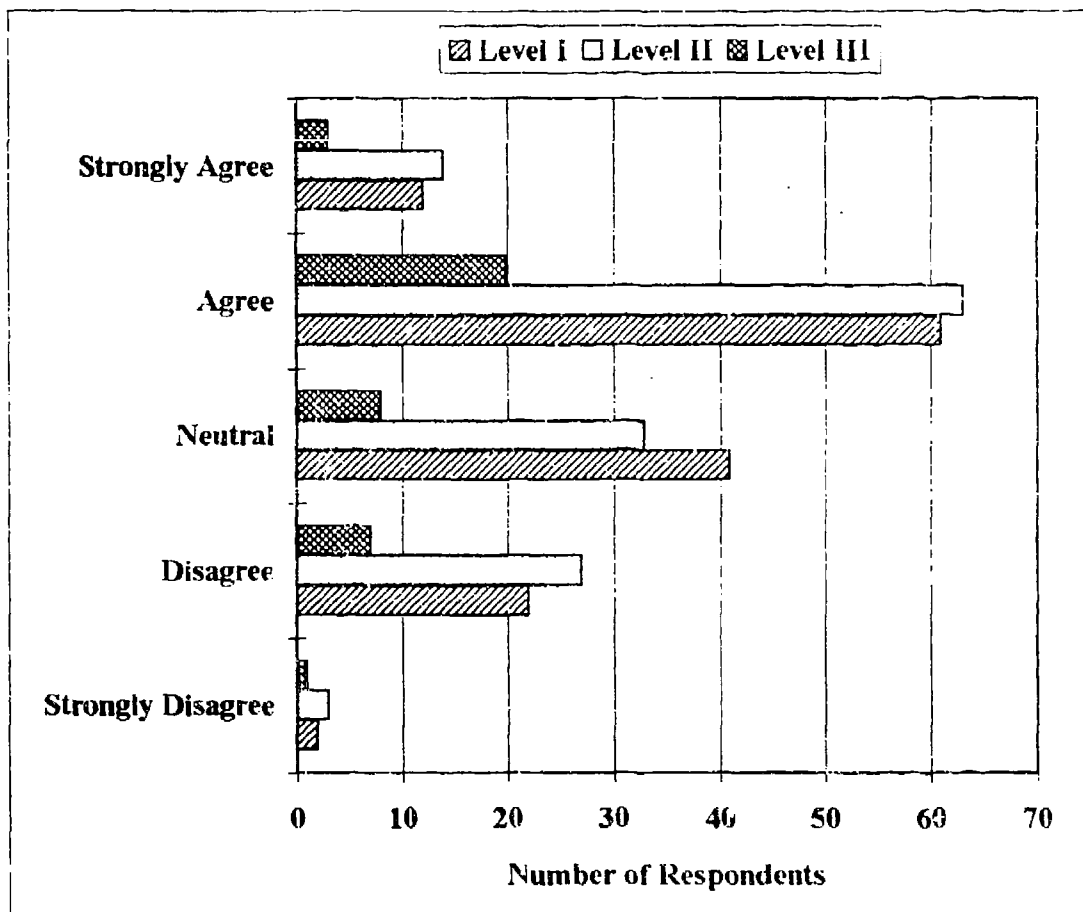


Figure C-20. Training is Specific Enough by Certification Levels

Survey Question 39: Receipt of Training When Needed

Table C-37. Receipt of Training by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	29	38	29	34	8
Level II	29	38	21	43	9
Level III	1	8	2	22	6
Total	59	84	52	99	23

Table C-38. Receipt of Training by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	9.15%	11.99%	9.15%	10.73%	2.52%
Level II	9.15%	11.99%	6.62%	13.56%	2.84%
Level III	0.32%	2.52%	0.63%	6.94%	1.89%
Total	18.61%	26.50%	16.40%	31.23%	7.26%

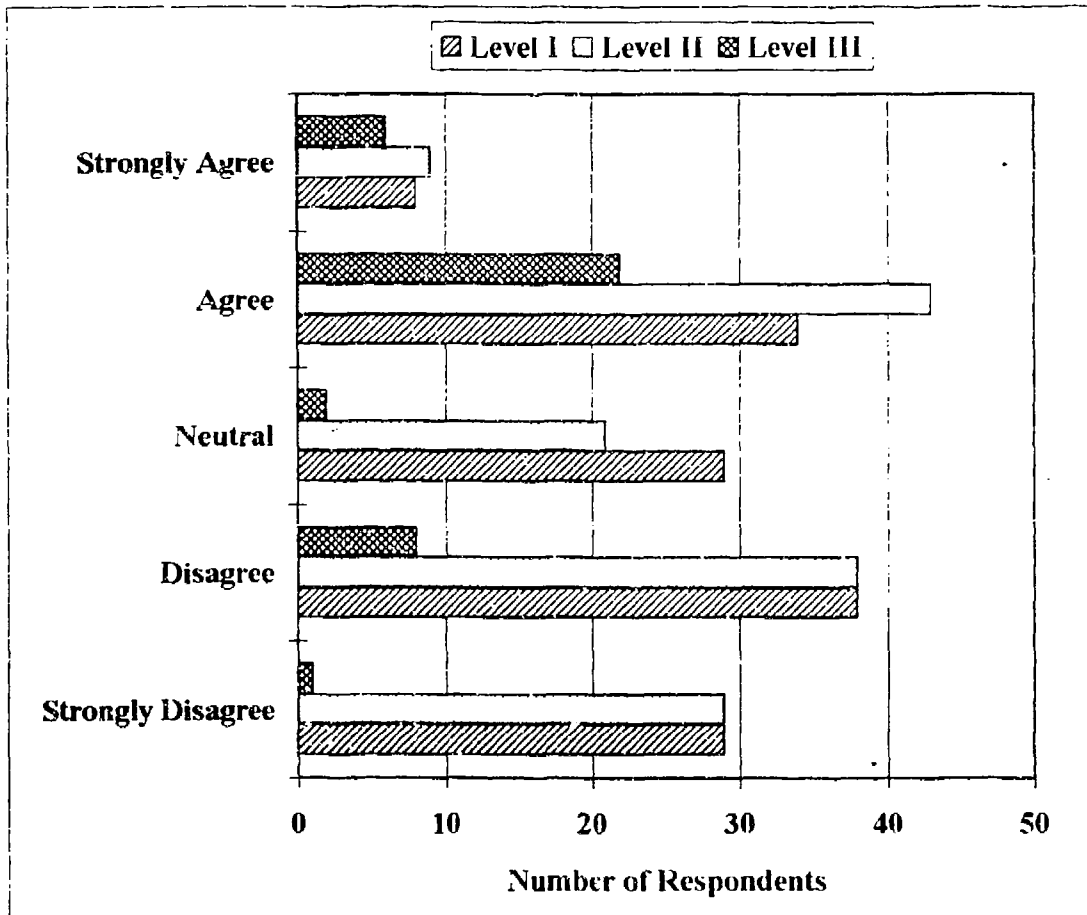


Figure C-21. Receipt of Training by Certification Levels

Survey Question 40: Training Needs Met Through Alternate Training Sources

Table C-39. Alternate Training Sources by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	6	37	61	29	5
Level II	9	37	56	25	10
Level III	2	20	12	5	0
Total	17	94	129	59	15

Table C-40. Alternate Training Sources by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	1.92%	11.82%	19.49%	9.27%	1.60%
Level II	2.88%	11.82%	17.89%	7.99%	3.19%
Level III	0.64%	6.39%	3.83%	1.60%	0.00%
Total	5.43%	30.03%	41.21%	18.85%	4.79%

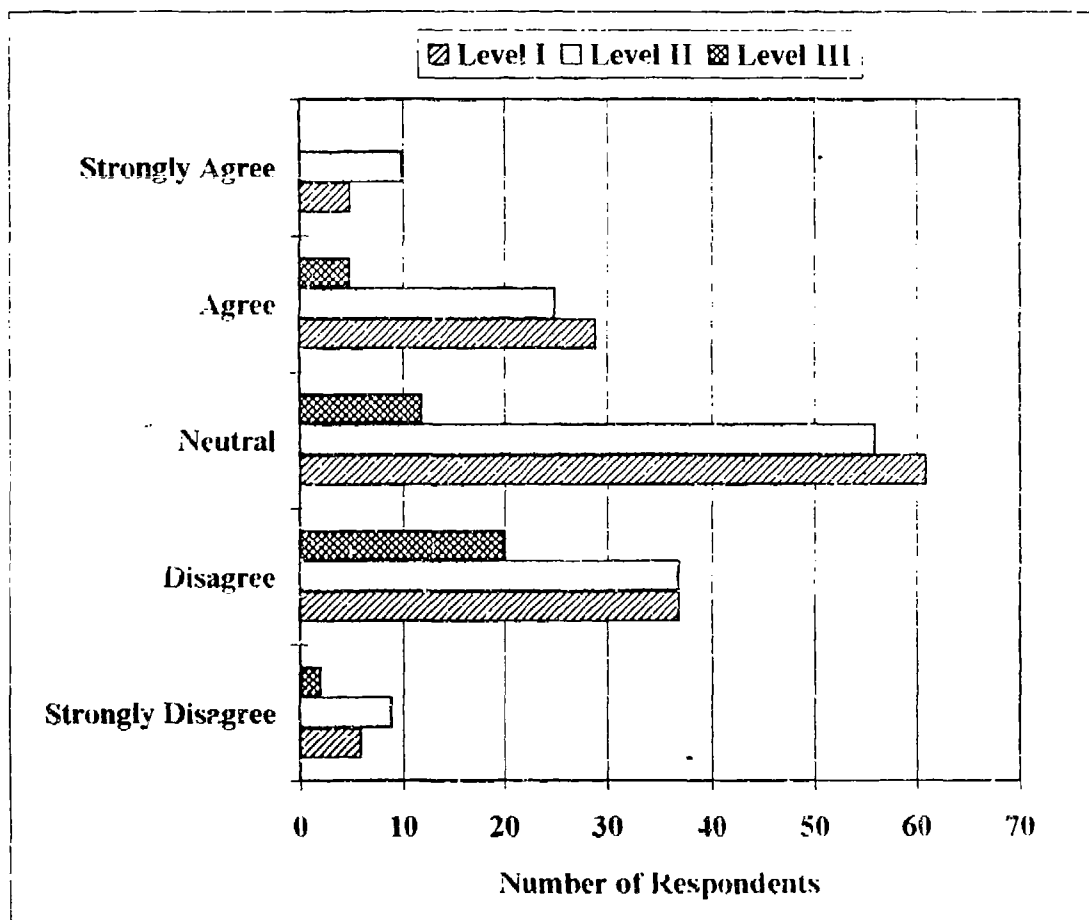


Figure C-22. Alternate Training Sources by Certification Levels

Survey Question 41: Better Able to Perform Job After Training

Table C-41. Ability After Training by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0	6	26	80	26
Level II	3	7	28	81	21
Level III	0	1	13	22	3
Total	3	14	67	183	50

Table C-42. Ability After Training by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.00%	1.89%	8.20%	25.24%	8.20%
Level II	0.95%	2.21%	8.83%	25.55%	6.62%
Level III	0.00%	0.32%	4.10%	6.94%	0.95%
Total	0.95%	4.42%	21.14%	57.73%	15.77%

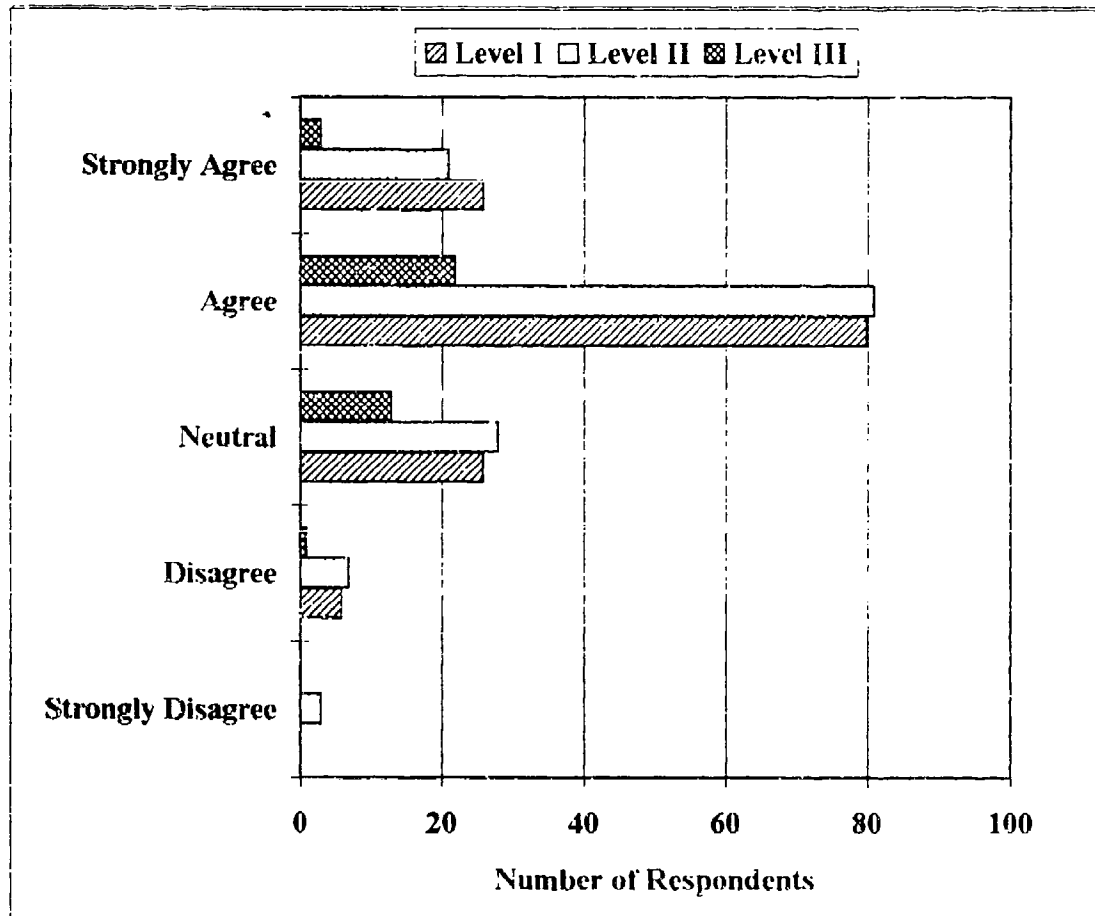


Figure C-23. Ability to Perform After Training by Certification Levels

Survey Question 42: Ability to Apply Material After Training

Table C-43. Ability to Apply Material by Number of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0	8	31	74	25
Level II	1	9	29	81	20
Level III	0	3	14	20	2
Total	1	20	74	175	47

Table C-44. Ability to Apply Material by Percentage of Respondents

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level I	0.00%	2.52%	9.78%	23.34%	7.89%
Level II	0.32%	2.84%	9.15%	25.55%	6.31%
Level III	0.00%	0.95%	4.42%	6.31%	0.63%
Total	0.32%	6.31%	23.34%	55.21%	14.83%

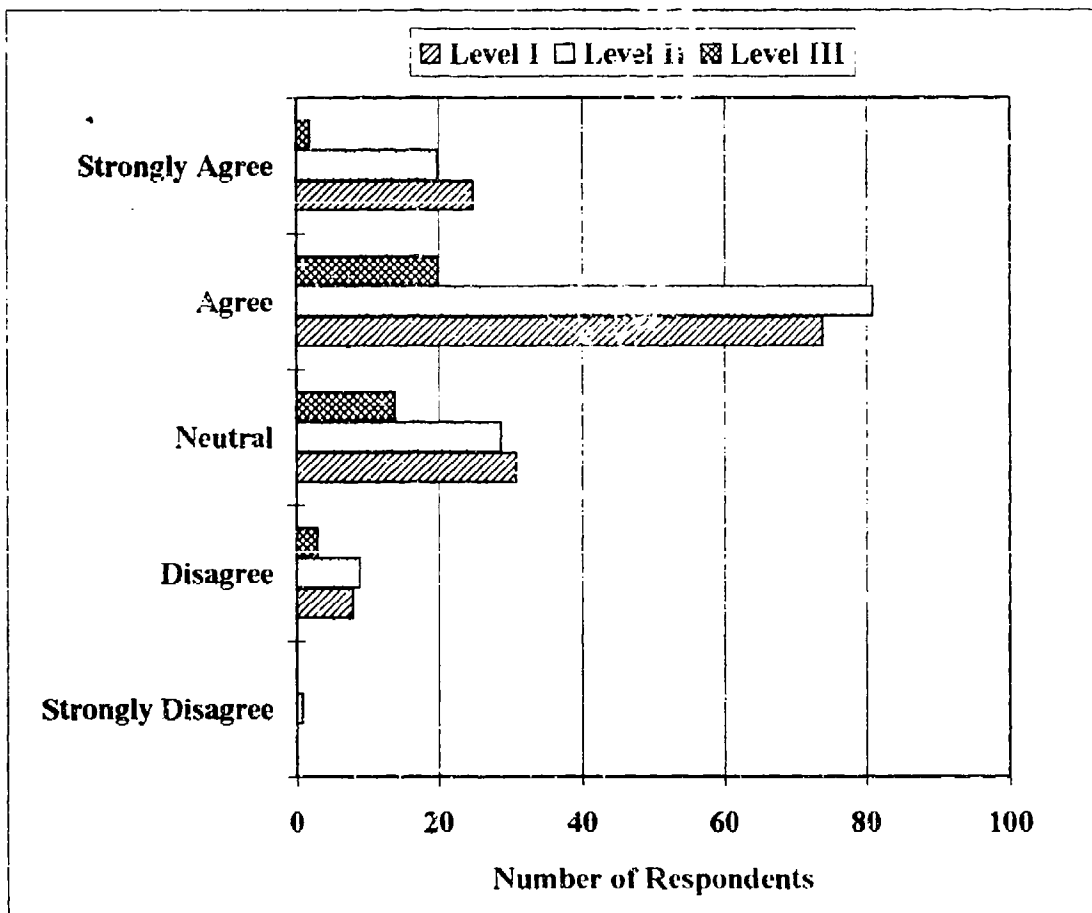


Figure C-24. Ability to Apply Material by Certification Levels

Appendix D: Competencies - Survey Questions 43 - 200

This appendix reports the following:

1. An overall ranking of the 79 units of instruction (competencies) by entire sample population and by certification level.
2. A graphical representation of importance and proficiency by entire sample population and within each certification level.
3. A comparison of the most and least important unit of instruction by sample population and within each certification level.
4. A comparison of rank order correlations by sample population and by certification level.

Table D-1. Overall Ranking of Units of Instruction by Importance in Percentages

Total Number of Respondents: 300 - 318																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Unit of Instruction (Competency)		Question Number					Very Unimportant					So-So					Important					Very Important					Percent Important					Question Number					No Experience					Not Proficient					Somewhat Proficient					Rather Proficient					Highly Proficient					Percent Proficient																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Contract Modifications/Options		191	262	131	754	3672	5181	8853	192	885	426	1541	3541	3617	7158																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Table D-1. Overall Ranking of Units of Instruction by Importance in Percentages (Continued)

Acquisition Planning	45	4.85	3.56	14.24	37.86	39.48	77.34	46	13.59	17.48	28.80	30.42	9.71	40.13
Price Related Factors	71	4.18	2.89	15.76	46.95	30.23	77.18	72	16.72	9.65	26.05	32.80	14.79	47.59
Fact-finding	127	3.28	3.61	16.07	34.10	42.95	77.05	128	16.72	5.25	20.98	31.48	25.58	57.06
Contract Administration Planning	149	3.28	4.92	14.43	45.25	31.80	77.05	150	15.41	9.84	27.87	31.48	15.41	46.89
Evaluating Other Terms & Conditions	123	2.61	3.92	16.99	42.48	33.99	76.47	124	10.78	7.84	28.43	35.95	16.99	52.94
Mistakes in Bids/Proposals	133	3.56	3.27	16.99	44.12	32.03	76.15	134	14.05	9.80	29.08	27.45	19.61	47.06
Cost Analysis	121	2.93	5.21	15.96	39.09	36.81	75.90	122	16.29	10.10	24.10	28.34	21.17	49.51
Protests	145	5.25	3.28	15.74	37.70	38.03	75.73	146	31.48	11.80	18.36	22.30	16.07	38.37
Terminations	193	2.95	5.25	17.05	41.97	32.79	74.76	194	24.26	14.43	22.95	24.26	14.10	38.36
Processing Bids	101	8.14	5.54	11.73	36.81	37.79	74.60	102	15.96	8.47	18.24	31.60	25.73	57.33
Technical Evaluation Factors	73	4.18	3.54	17.68	40.51	34.08	74.59	74	16.08	15.11	28.62	28.62	11.58	40.20
Funding Process	49	4.17	6.09	15.38	39.42	34.92	74.34	50	10.90	13.46	30.45	32.05	13.14	45.19
Bid Prices	107	7.82	4.56	13.36	36.16	38.11	74.27	108	15.64	5.86	19.54	33.88	25.08	58.96
Bid Acceptance Periods	103	8.14	5.86	12.38	37.79	35.83	73.62	104	15.96	7.49	19.54	28.66	28.34	57.00
Purchase Requests	47	5.13	6.09	15.71	40.38	32.69	73.07	48	7.69	6.09	18.59	42.31	25.32	67.63
Prebid Preproposal Conferences	95	4.22	6.17	16.56	42.53	30.52	73.05	96	19.16	10.71	17.21	29.22	23.70	52.92
Unallowable Costs	173	3.29	5.92	18.09	42.11	30.59	72.70	174	20.39	14.14	25.66	28.95	10.86	39.81
Reporting Performance Problems	167	4.25	5.23	17.97	38.56	33.99	72.55	168	20.59	11.76	26.80	28.76	12.09	40.85
Monitoring, Inspection & Acceptance	157	5.90	5.25	16.39	39.34	33.11	72.45	158	22.30	12.45	24.59	25.90	14.75	40.65
Sources of Supply/Services	59	6.73	5.77	15.06	43.91	28.53	72.44	60	11.54	7.69	24.04	39.74	16.99	56.73
Procurement/Source Selection Plans	77	6.15	4.85	17.15	43.04	28.80	71.84	78	19.74	14.56	26.86	26.21	12.62	38.83
Services Contracting Issues	57	8.65	6.73	13.14	44.23	27.24	71.47	58	20.51	10.58	25.00	29.49	14.42	43.91
Contract Close-outs	189	4.61	4.28	19.74	41.12	30.26	71.38	190	17.43	12.17	21.71	32.57	16.12	48.69
Claims	197	3.95	5.26	20.07	39.47	31.25	70.72	198	26.64	13.49	22.70	23.36	13.82	37.18
Invoices	171	4.61	6.91	18.09	33.88	36.51	70.39	172	17.11	13.82	18.75	28.29	22.04	50.33
Post-Award Orientations	151	3.62	7.24	19.41	43.42	26.32	69.74	152	21.71	12.83	20.07	28.95	16.45	45.40
Ordering Against Contracts	153	5.25	4.26	20.66	42.62	26.89	69.51	154	15.08	8.52	24.92	27.87	23.61	51.48
Audits	119	3.59	8.82	18.30	41.83	27.45	69.28	120	24.84	12.42	24.51	25.49	12.75	38.24
Preaward Inquiries	93	4.87	4.55	21.43	42.53	26.62	69.15	94	13.64	7.79	27.60	30.19	20.78	50.97

Table D-1. Overall Ranking of Units of Instruction by Importance in Percentages (Continued)

Progress/Advance Payments	179	4.93	7.24	19.41	42.11	26.32	68.43	180	22.04	11.18	24.34	30.59	11.84	42.43
Late Bids	105	8.14	6.51	17.26	35.83	32.25	68.08	106	16.61	8.47	24.43	24.76	25.73	50.49
Delays	159	5.56	6.54	19.93	43.46	24.51	67.97	150	22.88	13.73	26.14	26.47	10.78	37.25
Subcontracting Requirements	137	4.58	5.88	21.90	48.04	19.61	67.65	138	20.59	13.73	28.10	26.80	10.78	37.58
Stop Work	161	5.23	6.86	21.57	42.48	23.86	66.34	162	27.78	13.73	23.20	22.88	12.42	35.30
Defective Pricing	187	4.95	7.59	22.11	40.26	25.08	65.34	188	33.99	17.82	24.09	17.82	6.27	24.09
Fraud and Exclusion	147	5.57	3.61	25.90	36.72	28.20	64.92	148	37.05	14.10	22.95	18.69	7.21	25.90
Price and Fee Adjustments	181	4.28	8.88	22.04	43.42	21.38	64.80	182	27.96	17.76	20.72	24.34	9.21	33.55
Canceling Solicitations (IFBs/RFPs)	99	6.19	6.51	23.13	41.01	23.13	64.14	100	20.20	7.49	21.17	29.32	21.82	51.14
Remedies	163	5.56	6.21	24.84	40.52	22.88	63.40	164	29.08	14.05	26.47	20.26	10.13	30.39
Debriefing	143	5.90	8.52	22.95	37.05	25.57	62.62	144	28.85	10.82	20.00	23.93	16.40	40.33
Limitation of Costs	169	5.26	10.53	22.70	37.50	24.01	61.51	170	25.33	16.12	24.34	24.34	9.87	34.21
Set-Asides	61	6.09	8.65	24.68	39.42	21.15	60.57	62	11.54	10.58	31.41	31.73	14.74	46.47
Contract Financing	83	8.74	9.39	23.62	34.95	23.30	58.25	84	22.65	16.50	30.10	22.98	7.77	30.75
Accounting and Estimating Systems	183	6.56	10.46	25.25	40.33	17.38	57.71	184	32.13	20.33	25.90	17.38	4.26	21.64
Cost Accounting Standards	185	5.90	10.49	26.23	38.56	19.02	57.38	186	31.80	20.98	24.92	17.38	4.92	22.30
Assignment of Claims	175	5.28	10.56	27.39	39.93	16.83	56.76	176	29.70	15.18	26.73	19.80	8.58	28.38
Govt Property & Supply Sources	85	7.44	8.41	28.16	43.37	12.62	55.99	86	22.60	15.18	29.77	23.95	7.44	31.39
8(a) Procurements	63	8.01	7.37	29.81	35.58	19.23	54.81	64	19.87	12.50	24.36	28.85	14.42	43.27
Property	165	6.21	8.82	30.39	37.58	16.99	54.57	166	28.10	18.30	27.45	20.56	5.56	26.12
Bonds	195	9.87	11.84	24.01	31.91	22.37	54.28	196	36.51	12.17	19.08	20.39	11.84	32.23
Consent to Subcontract	155	6.23	7.54	33.77	37.38	15.08	52.46	156	28.85	19.02	28.52	16.39	7.22	23.61
Forecasting Requirements	43	10.90	11.86	25.64	33.33	18.27	51.60	44	25.00	12.50	32.69	24.04	5.77	29.81
Need for Bonds	87	14.61	11.36	23.05	31.17	19.81	50.98	88	34.09	14.61	17.86	20.78	12.66	33.44
Market Research	51	6.73	12.82	30.77	34.94	14.74	49.68	52	15.38	18.27	28.53	28.85	8.97	37.82
Collecting Contractor Debts	177	8.55	12.83	30.92	30.59	17.11	47.70	178	39.14	19.41	20.72	16.45	4.28	20.73
Letter Contracts	81	13.59	17.48	28.80	30.42	9.71	40.13	82	39.16	14.89	20.71	17.80	7.44	25.24
Unsolicited Proposal	67	8.97	16.67	35.26	30.45	8.65	39.10	68	24.68	17.95	29.17	20.51	7.69	28.20
Lease Vs. Purchase	69	13.50	14.79	32.80	28.30	10.61	38.91	70	37.94	18.33	24.76	13.18	5.79	18.97

Table D-2. Level I Ranking of Units of Instruction by Importance in Percentages

Total Number of Respondents: 127 - 132		Question Number										Percent Important		Very Important		So-So		Unimportant		Percent Important		Question No.		No Experience		Not Proficient		Somewhat Proficient		Rather Proficient		Highly Proficient		Percent Proficient	
Unit of Instruction (Competency)		1	2	3	4	5	1+2	1+2	4+5	4+5	Question No.	1	2	3	4	5	4+5	4+5	Percent Proficient																
Contract Modifications/Options		191	3.88	0.00	8.53	34.88	52.71	3.88	87.59	192	17.05	5.43	21.71	31.78	24.03	55.81																			
Competition Requirements		65	3.03	2.27	8.33	40.15	46.21	5.30	86.36	66	7.58	3.79	21.21	44.70	22.73	67.43																			
Specifications		53	3.82	3.82	6.11	31.30	54.96	7.61	86.26	54	12.21	7.63	36.64	32.82	10.69	43.51																			
Solicitation Preparation (IFBs/RFPs)		89	4.58	0.76	9.16	25.95	59.54	5.31	85.49	90	16.79	10.69	18.32	32.06	22.14	54.20																			
Statements of Work		55	6.06	2.27	6.82	28.79	56.06	8.33	84.85	56	12.12	10.61	31.82	31.82	13.64	45.46																			
Preparing Awards		139	6.15	0.00	9.23	40.77	45.85	6.15	84.62	140	23.08	6.92	16.92	36.15	16.92	53.07																			
Responsiveness		109	5.38	1.54	10.00	36.92	46.15	6.92	83.07	110	20.77	6.15	20.77	33.85	18.46	52.31																			
Conducting Negotiations		131	5.38	1.54	10.77	32.31	50.00	6.92	82.31	132	28.46	8.46	29.23	24.62	9.23	33.85																			
Awards		141	6.92	0.77	10.77	31.54	50.00	7.69	81.54	142	26.15	6.15	16.92	30.00	20.77	50.77																			
Ethics/Standards of Conduct		199	5.51	3.94	9.45	25.98	55.12	9.45	81.10	200	16.54	4.72	18.11	28.35	32.28	60.63																			
Technical Evaluations		113	4.62	1.54	13.08	47.69	33.08	6.16	80.77	114	27.69	10.77	26.92	24.62	10.00	34.62																			
Contract Administration Planning		149	5.38	2.31	11.54	45.38	35.38	7.69	80.76	150	26.92	7.69	25.38	28.46	11.54	40.00																			
Amending Solicitations		97	5.31	0.76	14.50	42.75	36.64	6.10	79.39	98	22.14	6.87	23.66	29.77	17.56	47.33																			
Processing Proposals		111	6.15	1.54	13.08	45.38	33.85	7.69	79.23	112	24.62	7.69	24.62	30.00	13.08	43.08																			
Responsibility		135	6.92	2.31	11.54	39.23	46.00	9.23	79.23	136	24.62	9.23	23.85	30.00	12.31	42.31																			
Publicizing Proposed Procurements		91	5.31	1.53	14.50	39.69	38.93	6.87	78.62	92	18.32	7.63	20.61	31.30	22.14	53.44																			
Purchase Requests		47	5.30	3.79	12.88	43.94	34.09	9.09	78.03	48	7.58	6.82	15.91	48.48	21.21	69.69																			
Price Related Factors		71	3.79	3.79	11.39	52.27	25.76	7.58	78.03	72	24.24	16.67	25.76	25.00	8.33	33.33																			
Bid Acceptance Periods		103	7.69	3.08	11.51	40.00	37.69	10.77	77.69	104	21.54	7.69	23.08	30.00	17.69	47.69																			
Processing Bids		101	7.69	2.31	12.31	37.69	40.00	10.00	77.69	102	21.54	8.46	23.08	30.77	16.15	46.92																			
Negotiation Strategy		129	6.92	0.00	15.38	29.23	48.46	6.92	77.69	130	29.23	8.46	32.31	21.54	8.46	30.00																			

Table D-2. Level I Ranking of Units of Instruction by Importance in Percentages (Continued)

Mistakes in Bids/Proposals	133	6.15	0.00	16.15	45.38	32.31	6.15	77.69	134	26.92	10.77	33.08	20.00	9.23	29.23
Method of Procurement	75	4.55	3.79	14.39	50.00	27.27	8.34	77.27	76	20.45	15.15	20.45	34.09	9.85	43.94
Bid Prices	107	7.69	2.31	13.08	37.69	39.23	10.00	76.92	108	23.08	6.92	22.31	33.85	13.85	47.70
Monitoring, Inspection & Acceptance	157	7.69	2.31	13.85	41.54	34.62	10.00	76.16	158	29.23	10.00	23.08	25.38	12.31	37.69
Selection of Contract Type	79	6.11	4.58	13.74	41.98	33.59	10.69	75.57	80	17.56	11.45	32.82	29.77	8.40	38.17
Sources of Supply/Services	59	6.82	2.27	15.91	46.21	28.79	9.09	75.00	60	13.64	6.82	22.73	40.15	16.67	56.82
Reporting Performance Problems	167	6.92	3.08	15.38	36.92	37.69	10.00	74.61	168	33.08	10.00	29.23	17.69	10.00	27.69
Evaluating Other Terms & Conditions	123	4.62	4.62	16.15	47.69	26.92	9.24	74.61	124	23.08	12.31	33.08	26.92	4.62	31.54
Competitive Range	125	6.15	1.54	17.69	45.38	29.23	7.69	74.61	126	23.08	10.00	27.69	27.69	11.54	39.23
Prebid Preproposal Conferences	95	5.34	3.05	17.56	45.04	29.01	8.39	74.05	96	28.24	10.69	19.85	29.01	12.21	41.22
Protests	145	7.69	3.08	15.38	37.69	35.15	10.77	73.84	146	52.31	10.77	17.69	13.85	5.38	19.23
Invoices	171	5.43	3.10	17.83	34.88	38.76	8.53	73.64	172	23.26	9.30	20.16	29.46	17.83	47.29
Funding Process	49	3.79	6.06	16.67	39.39	34.09	9.85	73.48	50	13.64	11.36	34.09	31.82	9.09	40.91
Cost and Pricing Data	117	4.62	4.62	17.69	39.23	33.85	9.24	73.08	118	31.54	13.85	30.77	16.15	7.69	23.84
Fact-finding	127	6.15	2.31	19.23	40.00	32.31	8.46	72.31	128	31.54	6.92	24.62	26.92	10.00	36.92
Price Objectives	115	5.38	1.54	20.77	41.54	30.77	6.92	72.31	116	24.62	12.31	30.00	22.31	10.77	33.08
Contract Close-outs	189	6.20	2.33	19.38	42.64	29.46	8.53	72.10	190	27.15	11.63	19.38	27.13	14.75	41.88
Claims	197	5.43	4.65	17.83	41.86	30.23	10.08	72.09	198	40.31	15.50	20.93	16.28	6.98	23.26
Terminations	193	5.43	3.10	19.38	38.76	33.33	8.53	72.09	194	40.31	16.28	22.48	13.95	6.98	20.93
Acquisition Planning	45	3.82	3.82	20.61	41.22	30.53	7.61	71.75	46	19.85	16.79	32.06	23.66	7.63	31.29
Technical Evaluation Factors	73	4.53	4.55	19.70	42.42	28.79	9.08	71.21	74	25.76	20.45	25.00	21.97	6.82	28.79
Late Bids	105	7.69	2.31	19.23	37.69	33.08	10.00	70.77	106	22.31	10.00	26.92	26.92	13.85	40.77
Services Contracting Issues	57	9.09	6.06	14.39	43.94	26.52	15.15	70.46	58	25.76	10.61	31.52	24.24	7.58	31.82
Canceling Solicitations (IFBs/RFPs)	99	5.38	4.62	20.00	43.85	26.15	10.00	70.00	100	30.77	9.23	22.31	26.15	11.54	37.69
Unallowable Costs	173	5.43	3.10	21.71	37.21	32.56	8.53	69.77	174	36.43	15.50	24.03	16.28	7.75	24.03
Progress/Advance Payments	179	6.98	6.20	17.05	41.86	27.91	13.18	69.77	180	38.76	8.53	17.05	24.81	10.85	35.66
Preaward Inquiries	93	5.31	3.82	21.37	41.98	27.48	9.16	69.46	94	21.37	12.21	31.30	20.61	14.50	35.11
Cost Analysis	121	5.38	6.15	19.23	39.23	30.00	11.53	69.23	122	34.62	11.54	26.92	16.15	10.77	26.92
Procurement Source Selection Plans	77	8.40	5.34	17.56	46.56	22.13	13.71	68.69	78	31.30	22.90	22.14	18.32	5.34	23.66

Table D-2. Level I Ranking of Units of Instruction by Importance in Percentages (Continued)

Mistakes in Bids/Proposals	133	6.15	0.00	16.15	45.38	32.31	6.15	77.69	134	26.92	10.77	33.08	20.00	9.23	29.23
Method of Procurement	75	4.55	3.79	14.39	50.00	27.27	8.31	77.27	76	20.45	15.15	20.45	34.09	9.85	43.94
Bid Prices	107	7.69	2.31	13.08	37.69	39.23	10.70	76.92	108	23.08	6.92	22.31	33.85	13.85	47.70
Monitoring, Inspection & Acceptance	157	7.69	2.31	13.85	41.54	34.62	10.00	76.16	158	29.23	10.00	23.08	25.38	12.31	37.69
Selection of Contract Type	79	6.11	4.58	13.74	41.98	33.59	10.69	75.57	80	17.56	11.45	32.82	29.77	8.40	38.17
Sources of Supply/Services	59	6.82	2.27	15.91	46.21	28.79	9.09	75.00	60	13.64	6.82	22.73	40.15	16.67	56.82
Reporting Performance Problems	167	6.92	3.08	15.38	36.92	37.69	10.00	74.61	168	33.08	10.00	29.23	17.69	10.00	27.69
Evaluating Other Terms & Conditions	123	4.62	4.62	16.15	47.69	26.92	9.24	74.61	124	23.08	12.31	33.08	26.92	4.62	31.54
Competitive Range	125	6.15	1.54	17.69	45.38	29.23	7.69	74.61	126	23.08	10.00	27.69	27.69	11.54	39.23
Prebid Proposal Conferences	95	5.34	3.05	17.56	45.04	29.01	8.39	74.05	96	28.24	10.69	19.85	29.01	12.21	41.22
Protests	145	7.69	3.08	15.38	37.69	36.15	10.77	73.84	146	52.31	10.77	17.69	13.85	5.38	19.23
Invoices	171	5.43	3.10	17.83	34.88	38.76	8.53	73.64	172	23.26	9.30	20.16	29.46	17.83	47.29
Funding Process	49	3.79	6.06	16.67	39.39	34.09	9.85	73.48	50	13.64	11.36	34.09	31.82	9.09	40.91
Cost and Pricing Data	117	4.62	4.62	17.69	39.23	33.85	9.24	73.08	118	31.54	13.85	30.77	16.15	7.69	23.84
Fact-finding	127	6.15	2.31	19.23	40.09	32.31	8.46	72.31	128	31.54	6.92	24.62	26.92	10.00	36.92
Price Objectives	115	5.38	1.54	20.77	41.54	30.77	6.92	72.31	116	24.62	12.31	30.00	22.31	10.77	33.08
Contract Close-outs	185	6.20	2.33	19.38	42.64	29.46	8.53	72.10	190	27.15	11.63	19.38	27.13	14.75	41.88
Claims	197	5.43	4.65	17.83	1.86	30.23	10.08	72.09	198	40.31	15.50	20.93	16.28	6.98	23.26
Terminations	193	5.43	3.10	19.38	38.76	33.33	8.53	72.09	194	40.31	16.28	22.48	13.95	6.98	20.93
Acquisition Planning	45	3.82	3.82	20.61	41.22	30.53	7.61	71.75	46	19.85	16.79	32.06	23.66	7.63	31.29
Technical Evaluation Factors	73	4.53	4.55	19.70	42.42	28.79	9.08	71.21	74	25.76	20.45	25.00	21.97	6.82	28.79
Late Bids	105	7.69	2.31	19.23	37.69	33.08	10.90	70.77	106	22.31	10.00	26.92	26.92	13.85	40.77
Services Contracting Issues	57	9.09	6.06	14.39	43.94	26.52	15.15	70.46	58	25.76	10.61	31.52	24.24	7.58	31.82
Canceled Solicitations (IFBs/RFPs)	99	5.38	4.62	20.00	43.85	26.15	10.00	70.00	100	30.77	9.23	22.31	26.15	11.54	37.69
Unallowable Costs	173	5.43	3.10	21.71	37.21	32.56	8.53	69.77	174	36.43	15.50	24.03	16.28	7.75	24.03
Progress/Advance Payments	179	6.98	6.20	17.05	41.86	27.91	13.18	69.77	180	38.76	8.53	17.05	24.81	10.85	35.66
Preaward Inquiries	93	5.31	3.82	21.37	41.98	27.48	9.16	69.46	94	21.37	12.21	31.30	20.61	11.50	35.11
Cost Analysis	121	5.38	6.15	19.23	39.23	30.00	11.53	69.23	122	34.62	11.54	26.92	16.15	10.77	26.92
Procurement Source Selection Plans	77	8.10	5.34	17.56	46.56	22.13	13.71	68.69	78	31.30	22.90	22.14	18.32	5.34	23.66

Table D-3. Level II Ranking of Units of Instruction by Importance in Percentages

Total Number of Respondents: 134 - 140														
Unit of Instruction (Competency)	V Unimportant					V Important								
	1	2	3	4	5	1	2	3	4	5				
Question No.	Percent Unimportant					Percent Important								
	Question No.					No Experience								
	Percent Proficient					Percent Proficient								
	1	2	3	4	5	1	2	3	4	5				
	Somewhat Proficient					Rather Proficient								
	Highly Proficient					Percent Proficient								
	4+5					4+5								
Unit of Instruction (Competency)	191	219	0.00	8.03	37.23	52.55	89.78	192	3.65	2.19	12.41	38.69	43.07	81.76
Contract Modifications/Options	55	3.57	1.43	7.14	33.57	54.29	87.86	56	5.71	7.14	28.57	41.43	17.14	58.57
Statements of Work	65	2.86	2.14	7.86	40.00	47.14	87.14	66	4.29	2.14	22.86	37.14	33.57	70.71
Competition Requirements	131	2.19	2.19	8.76	32.85	54.01	86.86	132	2.92	7.30	19.71	32.12	37.96	70.08
Conducting Negotiations	199	2.99	2.24	8.21	29.10	57.46	86.56	200	3.73	5.22	8.96	26.12	55.97	82.09
Ethics-Standards of Conduct	129	1.48	2.22	11.11	35.56	49.63	85.19	130	2.96	10.37	20.74	30.37	35.56	65.93
Negotiation Strategy	79	3.62	3.62	9.42	39.13	44.20	83.33	80	6.52	2.17	30.43	38.41	22.46	60.87
Selection of Contract Type	75	4.35	1.5	10.87	39.13	44.20	83.33	76	11.59	5.80	25.36	36.23	21.01	57.24
Method of Procurement	109	3.65	4.38	8.76	44.53	38.69	83.22	110	8.03	2.92	15.33	40.15	33.58	73.73
Responsiveness	115	1.46	2.19	13.14	36.50	46.72	83.22	116	2.92	5.84	24.82	32.85	33.58	66.43
Price Objectives	53	2.86	4.29	10.00	35.71	47.14	82.85	54	7.14	10.71	31.43	32.86	17.86	50.72
Specifications	89	5.07	3.62	8.70	31.88	50.72	82.60	90	5.80	1.45	18.84	38.41	35.51	73.92
Solicitation Preparation (IFBs/RFPs)	117	1.46	3.65	12.41	32.85	49.64	82.49	118	1.46	10.22	24.82	35.04	28.47	63.51
Cost and Pricing Data	111	3.65	3.65	10.95	34.31	47.45	81.76	112	7.30	2.19	18.25	33.58	38.69	72.27
Processing Proposals	135	2.19	2.92	14.60	40.88	39.42	80.30	136	5.11	4.38	17.52	38.69	34.31	73.00
Responsibility	139	3.68	5.88	11.03	32.55	47.06	79.61	140	8.09	8.09	15.44	30.15	38.24	68.39
Preparing Awards	113	2.19	5.11	13.14	31.39	48.18	79.57	114	2.92	10.22	23.36	39.42	24.09	62.51
Technical Evaluations	97	5.11	4.38	11.68	42.34	36.50	78.84	98	10.22	4.38	12.41	32.85	40.15	73.00
Amending Solicitations	121	1.46	4.38	15.34	35.77	43.07	78.84	122	3.65	10.95	24.82	32.12	28.47	60.59
Cost Analysis	125	2.19	3.65	15.33	43.80	35.04	78.84	126	4.38	3.65	22.63	41.61	27.74	69.35
Competitive Range	127	1.47	3.68	16.18	27.94	50.74	78.68	128	7.35	4.41	20.59	35.29	32.74	67.65
Fact-finding														

Table D-3. Level II Ranking of Units of Instruction by Importance in Percentages (Continued)

Awards	141	368	515	1324	3235	4559	7794	142	809	882	1471	3088	3750	68.38
Publicizing Proposed Procurements	91	657	438	1168	3723	4015	7738	92	730	438	1241	3504	4088	75.92
Mistakes in Bids/Proposals	133	219	365	1679	4672	3066	7738	134	584	876	2993	2993	2555	55.48
Unallowable Costs	173	221	662	1397	4632	3088	7720	174	1029	1618	2279	3603	1471	50.74
Acquisition Planning	45	725	435	1159	3696	3986	7682	46	1087	1812	2681	3188	1232	44.20
Terminations	193	146	657	1533	4307	3358	7665	194	1460	1460	2336	2847	1898	47.45
Price Related Factors	71	576	216	1583	4245	3381	7626	72	1367	504	2734	3813	1583	53.96
Evaluating Other Terms & Conditions	123	146	292	1971	3869	3723	7592	124	219	438	2993	4234	2117	63.51
Contract Administration Planning	149	221	588	1618	4412	3162	7574	150	882	1250	3162	3015	1692	47.07
Audits	119	147	735	1618	3971	3529	7500	120	1103	1324	2206	3529	1838	53.67
Technical Evaluation Factors	73	432	216	1871	3957	3525	7482	74	1151	1439	2950	3094	1367	44.61
Bid Prices	107	876	584	1168	3869	3504	7373	108	1241	438	1971	3285	3066	63.51
Protests	145	441	294	1912	3529	3824	7353	146	1985	1471	2059	2794	1671	44.65
Processing Bids	101	949	730	1022	3942	3398	7340	102	1460	803	1679	3066	2993	60.59
Funding Process	49	571	571	1571	3857	3429	7286	50	1143	1571	2571	3071	1673	47.44
Prebid-Preproposal Conferences	95	438	876	1460	4234	2993	7227	96	1460	1168	1606	2847	2920	57.67
Invoices	171	515	882	1471	3603	3529	7132	172	1397	1691	1691	2647	2574	52.21
Ordering Against Contracts	153	515	441	1985	4265	2795	7060	154	809	809	2574	2647	3162	58.09
Post-Award Orientations	151	294	882	1765	4118	2941	7059	152	1397	1397	2353	2721	2132	48.53
Monitoring, Inspection & Acceptance	157	588	588	1765	3529	3529	7058	158	1912	1397	2647	2426	1618	40.44
Contract Close-outs	189	368	515	2059	3676	3382	7058	190	1176	1103	2721	3088	1912	50.00
Subcontracting Requirements	137	365	511	2117	4745	2263	7008	138	949	1314	3358	2920	1460	43.80
Procurement/Source Selection Plans	77	580	362	2101	3841	3116	6957	78	1449	942	3333	2899	1377	42.76
Bid Acceptance Periods	103	1022	657	1387	3650	3285	6935	104	1387	803	1898	2409	3504	59.13
Sources of Supply/Services	59	857	929	1286	4214	2714	6928	60	1286	1000	2500	3643	1571	52.14
Defective Pricing	187	441	735	1912	3824	3088	6912	188	2574	1985	2500	1985	956	29.41
Purchase Requests	47	643	714	1786	3357	3500	6857	48	929	643	1929	3500	3000	65.00
Claims	197	368	515	2279	3456	3382	6838	198	1985	1397	2279	2647	1691	43.38
Reporting Performance Problems	167	292	657	2263	3431	3358	6789	168	1460	1460	2628	3139	1314	44.53

Table D-3. Level II Ranking of Units of Instruction by Importance in Percentages (Continued)

Services Contracting Issues	57	10.71	7.86	13.57	42.86	25.00	67.86	58	20.00	12.14	18.57	35.71	13.57	49.28
Progress/Advance Payments	179	3.68	6.62	22.06	41.91	25.74	67.65	180	11.76	11.76	30.15	33.09	13.24	46.33
Delays	159	5.84	5.11	21.90	42.34	24.82	67.16	160	18.25	14.60	27.01	24.82	15.33	40.15
Preaward Inquiries	93	5.84	3.65	23.36	43.07	24.09	67.16	94	10.22	4.38	27.74	35.77	21.90	57.67
Late Bids	105	10.22	6.57	18.98	34.31	29.93	64.24	106	15.33	7.30	24.09	21.17	32.12	53.29
Stop Work	161	4.38	6.57	24.82	40.88	23.36	64.24	162	21.17	15.33	21.90	24.82	16.79	41.61
Remedies	163	4.38	5.84	26.28	40.88	22.63	63.51	164	23.36	16.06	24.82	22.63	13.14	35.77
Fraud and Exclusion	147	5.15	2.21	29.41	33.82	29.41	63.23	148	27.21	18.38	25.00	22.06	7.35	29.41
Price and Fee Adjustments	181	4.41	8.82	25.00	36.76	25.00	61.76	182	20.59	20.59	19.12	26.47	13.24	39.71
Cost Accounting Standards	185	5.84	10.22	22.63	35.77	25.55	61.32	186	21.90	22.63	27.74	21.17	6.57	27.74
Debriefing	143	5.15	8.82	25.00	30.88	30.15	61.03	144	19.85	11.76	21.32	29.04	17.65	46.69
Limitation of Costs	169	5.88	13.24	20.59	34.56	25.74	60.30	170	18.36	18.38	27.21	26.47	9.56	36.03
Canceling Solicitations (IFBs/RFPs)	99	8.76	5.84	25.55	37.23	22.63	59.86	100	15.33	5.11	21.90	29.20	28.47	57.67
Accounting and Estimating Systems	183	7.30	10.95	22.63	33.58	25.55	59.13	184	27.82	21.17	27.74	18.25	8.03	26.28
Govt Property & Supply Sources	85	8.70	6.52	26.09	46.38	12.32	58.70	86	17.39	13.77	34.78	26.81	7.25	34.06
Property	165	5.11	8.76	29.20	37.96	18.98	56.94	166	19.71	20.44	28.47	24.09	7.30	31.39
Assignment of Claims	175	3.68	11.03	28.68	38.24	18.38	56.62	176	21.32	17.65	27.21	19.85	13.97	33.82
Contract Financing	83	7.97	8.70	28.99	28.99	25.36	54.35	84	13.77	16.67	34.78	23.91	10.87	34.78
Consent to Subcontract	155	5.88	8.09	33.09	36.03	16.92	52.95	156	19.85	27.21	30.88	11.76	10.30	22.06
8(a) Procurements	63	8.57	7.86	30.71	33.57	19.29	52.86	64	15.71	12.86	25.00	30.00	16.43	46.43
Set-Asides	61	7.14	9.29	30.71	32.14	20.71	52.85	62	10.00	12.86	33.57	30.00	13.57	43.57
Forecasting Requirements	43	12.86	15.00	20.00	32.86	19.29	52.15	44	25.71	13.57	25.71	27.14	7.86	35.00
Collecting Contractor Debts	177	9.56	12.50	29.41	32.35	16.18	48.53	178	32.35	24.26	20.59	16.18	6.62	22.80
Bonds	195	11.03	11.76	29.41	29.41	18.38	47.79	196	34.56	13.97	19.12	19.12	13.24	32.36
Market Research	51	8.57	14.29	32.14	32.86	12.14	45.00	52	17.14	20.00	27.86	25.71	9.29	35.00
Letter Contracts	81	10.87	18.12	26.81	31.88	12.32	44.20	82	31.16	12.32	26.09	20.29	10.14	30.43
Need for Bonds	87	17.39	10.87	29.71	28.99	13.04	42.03	88	36.23	10.87	17.39	21.74	13.77	35.51
Lease's Purchase	69	14.39	15.11	29.30	36.22	10.79	41.01	70	34.53	20.14	22.30	15.11	7.91	23.02
Unsolicited Proposal	67	8.57	17.14	35.71	29.29	9.29	38.58	68	22.86	20.71	25.71	22.14	8.57	30.71

Table D-4. Level III Ranking of Units of Instruction by Importance in Percentages

Total Number of Respondents: 39 - 40																												
Unit of Instruction (Competency)	Question Number	Very Unimportant					So-So	Important					Percent Important					Question No.	No Experience	Not Proficient					Somewhat Proficient	Rather Proficient	Highly Proficient	Percent Proficient
		1	2	3	4	5		4+5	1	2	3	4	5	1	2	3	4			5								
Unit of Instruction (Competency)																												
Acquisition Planning	45	2.50	0.00	0.00	30.00	67.50	97.50	46	2.50	17.50	25.00	47.50	7.50	55.00														
Method of Procurement	75	0.00	2.50	0.00	45.00	52.50	97.50	76	0.00	0.00	7.50	40.00	52.50	92.50														
Ethics/Standards of Conduct	199	0.00	2.56	0.00	30.77	66.67	97.44	200	0.00	0.00	2.56	33.33	64.10	97.43														
Statements of Work	55	0.00	0.00	5.00	37.50	57.50	95.00	56	0.00	2.50	20.00	50.00	27.50	77.50														
Competition Requirements	65	0.00	2.50	2.50	37.50	57.50	95.00	66	0.00	2.50	5.00	35.00	57.50	92.50														
Selection of Contract Type	79	0.00	0.00	5.00	40.00	55.00	95.00	80	2.50	0.00	5.00	40.00	52.50	92.50														
Negotiation Strategy	129	0.00	7.89	0.00	26.32	65.79	92.11	130	0.00	2.63	7.89	31.58	57.89	89.47														
Procurement/Source Selection Plans	77	0.00	7.50	2.50	47.50	42.50	90.00	78	0.00	5.00	20.00	42.50	32.50	75.00														
Solicitation Preparation (IFBs/RFPs)	89	0.00	7.50	2.50	30.00	60.00	90.00	90	0.00	7.50	5.00	32.50	55.00	87.50														
Price Objectives	115	0.00	5.00	5.00	37.50	52.50	90.00	116	0.00	2.50	10.00	35.00	52.50	87.50														
Protests	145	0.00	5.13	5.13	46.15	43.59	89.74	146	2.56	5.13	12.82	30.77	48.72	79.49														
Conducting Negotiations	131	0.00	5.13	5.13	15.38	74.36	89.74	132	0.00	2.56	5.13	38.46	53.85	92.31														
Services Contracting Issues	57	0.00	5.00	7.50	50.00	37.50	87.50	58	5.00	5.00	25.00	25.00	40.00	65.00														
Processing Proposals	111	0.00	10.00	2.50	35.00	52.50	87.50	112	0.00	2.50	12.50	25.00	60.00	85.00														
Cost and Pricing Data	117	0.00	7.50	5.00	30.00	57.50	87.50	118	0.00	5.00	12.50	50.00	32.50	82.50														
Cost Analysis	121	0.00	5.00	7.50	50.00	37.50	87.50	122	0.00	2.50	12.50	55.00	30.00	85.00														
Fact-finding	127	0.00	7.69	5.13	35.90	51.28	87.18	128	0.00	2.56	10.26	33.33	53.85	87.18														
Responsibility	135	0.00	5.13	7.69	28.21	58.97	87.18	136	0.00	2.56	10.26	35.90	51.28	87.18														
Awards	141	0.00	5.13	7.69	28.21	58.97	87.18	142	2.56	5.13	5.13	30.77	56.41	87.18														
Debriefing	143	0.00	7.69	5.13	48.72	38.46	87.18	144	2.56	12.82	5.13	41.03	38.46	79.49														
Contract Modifications/Options	191	0.00	10.26	2.56	41.03	46.15	87.18	192	0.00	7.69	5.13	35.90	51.28	87.18														

Table D-4. Level III Ranking of Units of Instruction by Importance in Percentages (Continued)

Specifications	53	0.00	5.00	10.00	50.00	35.00	85.00	54	5.00	2.50	32.50	45.00	15.00	60.00
Technical Evaluation Factors	73	2.50	5.00	7.50	37.50	47.50	85.00	74	0.00	0.00	37.50	42.50	20.00	62.50
Competitive Range	125	0.00	7.69	7.69	35.90	48.72	84.62	126	0.00	2.56	5.13	41.03	51.28	92.31
Preparing Awards	139	2.56	7.69	5.13	35.90	48.72	84.62	140	0.00	10.26	5.13	30.77	53.85	84.62
Evaluating Other Terms & Conditions	123	0.00	5.13	10.26	38.46	46.15	84.61	124	0.00	5.13	7.69	43.59	43.59	87.18
Funding Process	49	0.00	7.50	10.00	42.50	40.00	82.50	50	0.00	12.50	35.00	37.50	15.00	52.50
Publicizing Proposed Procurements	91	0.00	7.50	10.00	45.00	37.50	82.50	92	2.50	2.50	12.50	30.00	52.50	82.50
Amending Solicitations	97	0.00	10.00	7.50	42.50	40.00	82.50	98	0.00	5.00	12.50	25.00	57.50	82.50
Responsiveness	109	0.00	10.00	7.50	25.00	57.50	82.50	110	0.00	5.00	7.50	30.00	57.50	87.50
Technical Evaluations	113	0.00	10.00	7.50	27.50	55.00	82.50	114	0.00	7.50	17.50	42.50	32.50	75.00
Reporting Performance Problems	167	0.00	7.69	10.26	58.97	23.08	82.05	168	0.00	7.69	20.51	56.41	15.38	71.79
Price Related Factors	71	0.00	2.50	20.00	45.00	32.50	77.50	72	2.50	2.50	22.50	40.00	32.50	72.50
Terminations	193	0.00	7.69	15.38	48.72	28.21	76.93	194	5.13	7.69	23.08	43.59	20.51	64.10
Sources of Supply/Services	59	0.00	5.00	20.00	42.50	32.50	75.00	60	0.00	2.50	25.00	50.00	22.50	72.50
Preaward Inquiries	93	0.00	10.00	15.00	42.50	32.50	75.00	94	0.00	5.00	15.00	42.50	37.50	80.00
Bid Acceptance Periods	103	2.50	12.50	10.00	35.00	40.00	75.00	104	5.00	5.00	10.00	40.00	40.00	80.00
Audits	119	0.00	7.50	17.50	52.50	22.50	75.00	120	5.00	10.00	27.50	35.00	22.50	57.50
Claims	197	0.00	7.69	17.95	48.75	25.64	74.39	198	5.13	5.13	28.21	35.90	25.64	61.54
Subcontracting Requirements	137	0.00	7.69	17.95	61.54	12.82	74.36	138	0.00	12.82	20.51	51.28	15.38	66.66
Ordering Against Contracts	153	0.00	7.69	17.95	48.72	25.64	74.36	154	2.56	5.13	15.38	38.46	38.46	76.92
Purchase Requests	47	0.00	10.00	17.50	52.50	20.00	72.50	48	2.50	2.50	25.00	47.50	22.50	70.00
Set-Asides	61	0.00	7.50	20.00	50.00	22.50	72.50	62	0.00	0.00	20.00	50.00	30.00	80.00
Prebid/Preproposal Conferences	95	0.00	7.50	20.00	35.00	37.50	72.50	96	5.00	7.50	12.50	32.50	42.50	75.00
Late Bids	105	2.50	20.00	5.00	35.00	37.50	72.50	106	2.50	7.50	17.50	30.00	42.50	72.50
Contract Administration Planning	149	0.00	10.26	17.95	48.72	23.08	71.80	150	0.00	7.69	23.08	46.15	23.08	69.23
Post-Award Orientations	151	0.00	12.82	15.38	53.85	17.95	71.80	152	0.00	12.82	23.08	43.59	20.51	64.10
Stop Work	161	0.00	10.26	17.95	48.72	23.08	71.80	162	2.56	10.26	25.64	46.15	15.38	61.53
Contract Close-outs	189	2.56	7.69	17.95	51.28	20.51	71.79	190	5.13	17.95	10.26	56.41	10.26	66.67
Delays	159	0.00	12.82	15.38	46.15	25.64	71.79	160	5.13	12.82	12.82	56.41	12.82	69.23

Table D-4. Level III Ranking of Units of Instruction by Importance in Percentages (Continued)

Processing Bids	101	5.00	10.00	15.00	25.00	45.00	70.00	102	2.50	10.00	7.50	37.50	42.50	80.00
Price and Fee Adjustments	181	0.00	10.26	20.51	51.28	17.95	69.23	182	2.56	15.38	17.95	48.72	15.38	64.10
Remedies	163	0.00	10.26	20.51	46.15	23.08	69.23	164	2.56	12.82	28.21	41.03	15.38	56.41
Bid Prices	107	5.00	7.50	20.00	22.50	45.00	67.50	108	2.50	7.50	10.00	37.50	42.50	80.00
Mistakes in Bids/Proposals	133	0.00	12.82	20.51	30.77	35.90	66.67	134	0.00	10.26	12.82	43.59	33.33	76.92
Limitation of Costs	169	0.00	15.38	17.93	43.59	23.08	66.67	170	5.13	15.38	15.38	43.59	20.51	64.10
Unallowable Costs	173	0.00	12.82	20.51	43.59	23.08	66.67	174	2.56	2.56	41.03	46.13	7.69	53.82
Progress Advance Payments	179	2.56	12.82	17.95	43.59	23.08	66.67	180	2.56	17.95	28.21	41.03	10.26	51.29
Monitoring, Inspection & Acceptance	157	0.00	12.82	20.51	46.15	20.51	66.66	158	10.26	15.38	23.08	33.33	17.95	51.28
8(a) Procurements	63	2.50	5.00	30.00	40.00	22.50	62.50	64	0.00	2.50	20.00	55.00	22.50	77.50
Contract Financing	83	2.50	12.50	22.50	37.50	25.00	62.50	84	0.00	15.00	32.50	42.50	10.00	52.50
Fraud and Exclusion	147	0.00	10.26	28.21	35.90	25.64	61.54	148	5.13	10.26	30.77	41.03	12.82	53.85
Defective Pricing	187	0.00	12.82	25.64	51.28	10.26	61.54	188	10.26	15.38	30.77	35.90	7.69	43.59
Canceling Solicitations (IFBs/RFPs)	99	0.00	15.00	25.00	45.00	15.00	60.00	100	2.50	10.00	15.00	40.00	32.50	72.50
Accounting and Estimating Systems	183	0.00	17.95	23.08	53.85	5.13	58.98	184	0.00	38.46	33.33	28.21	0.00	28.21
Invoices	171	0.00	12.82	30.77	23.08	33.33	56.41	172	7.69	17.95	20.51	30.77	23.08	53.85
Cost Accounting Standards	185	2.56	15.38	25.64	48.72	7.69	56.41	186	2.56	25.64	43.59	25.64	2.56	28.20
Letter Contracts	81	2.50	17.50	25.00	47.50	7.50	55.00	82	0.00	7.50	32.50	45.00	15.00	60.00
Govt Property & Supply Sources	85	2.50	17.50	25.00	45.00	10.00	55.00	86	5.00	15.00	30.00	42.50	7.50	50.00
Market Research	51	2.50	17.50	27.50	42.50	10.00	52.50	52	2.50	17.50	40.00	30.00	10.00	40.00
Property	165	0.00	20.51	28.21	41.03	10.26	51.29	166	7.69	17.95	35.90	38.46	0.00	38.46
Consent to Subcontract	155	0.00	10.26	38.46	43.59	7.69	51.28	156	7.69	17.96	30.77	33.33	10.26	43.59
Assignment of Claims	175	0.00	20.51	30.77	38.46	10.26	48.72	176	12.82	7.69	30.77	43.59	5.13	48.72
Forecasting Requirements	43	10.00	12.50	30.00	32.50	15.00	47.50	44	15.00	12.50	42.50	25.00	5.00	30.00
Unsolicited Proposal	67	0.00	15.00	37.50	40.00	7.50	47.50	68	2.50	12.50	37.50	35.00	12.50	47.50
Need for Bonds	87	15.00	15.00	25.00	32.50	12.50	45.00	88	20.00	25.00	20.00	22.50	12.50	35.00
Bonds	195	7.69	25.64	28.21	28.21	10.26	38.47	196	25.64	12.82	20.51	30.77	10.26	41.03
Lease Vs Purchase	69	7.50	22.50	35.00	20.00	15.00	35.00	70	7.50	22.50	42.50	22.50	5.00	27.50
Collecting Contractor Debts	177	5.13	25.64	35.90	20.51	12.82	33.33	178	15.38	17.95	33.33	28.21	5.13	33.34

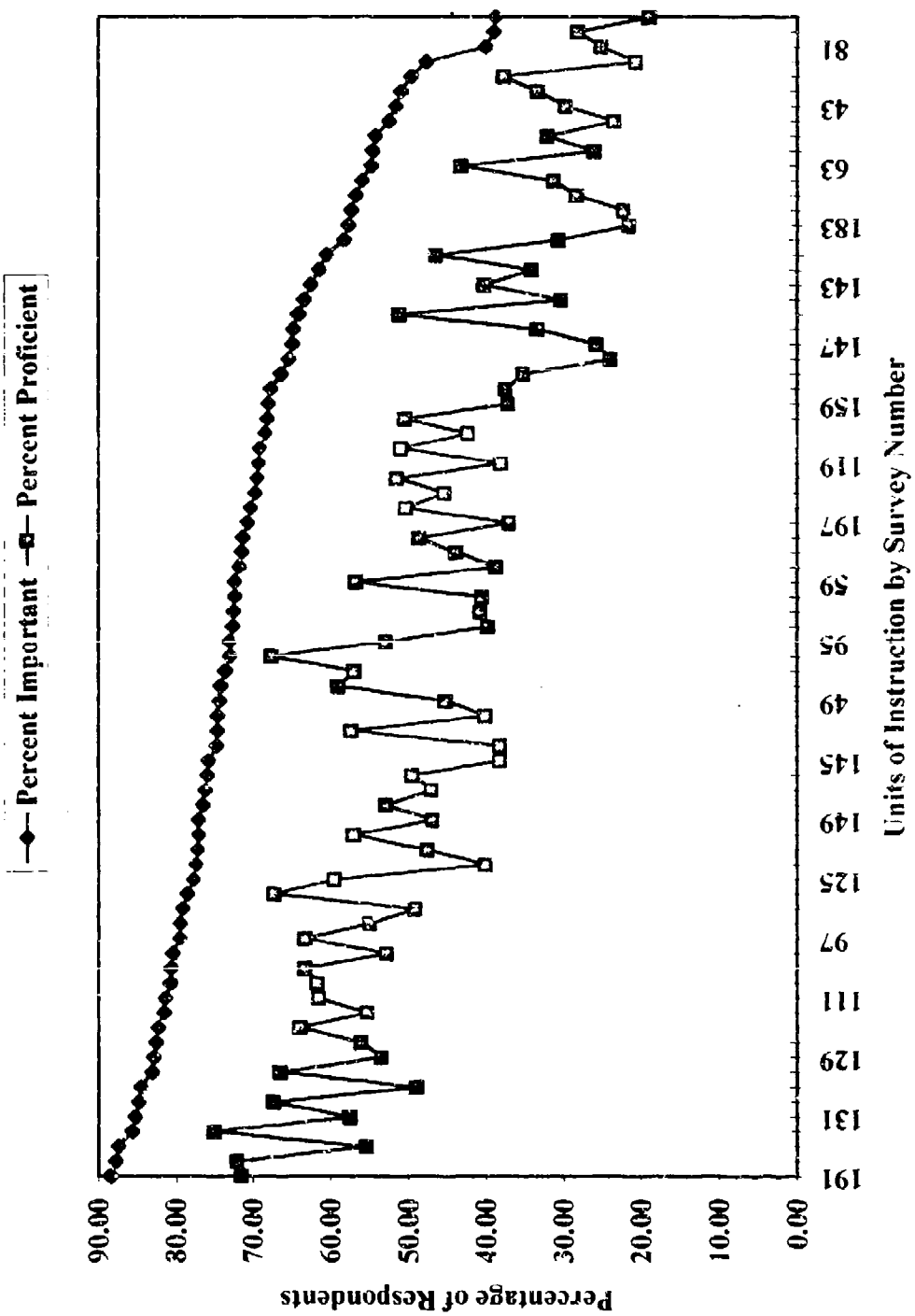


Figure D-1. Ranking of Units of Instruction by Importance - Overall

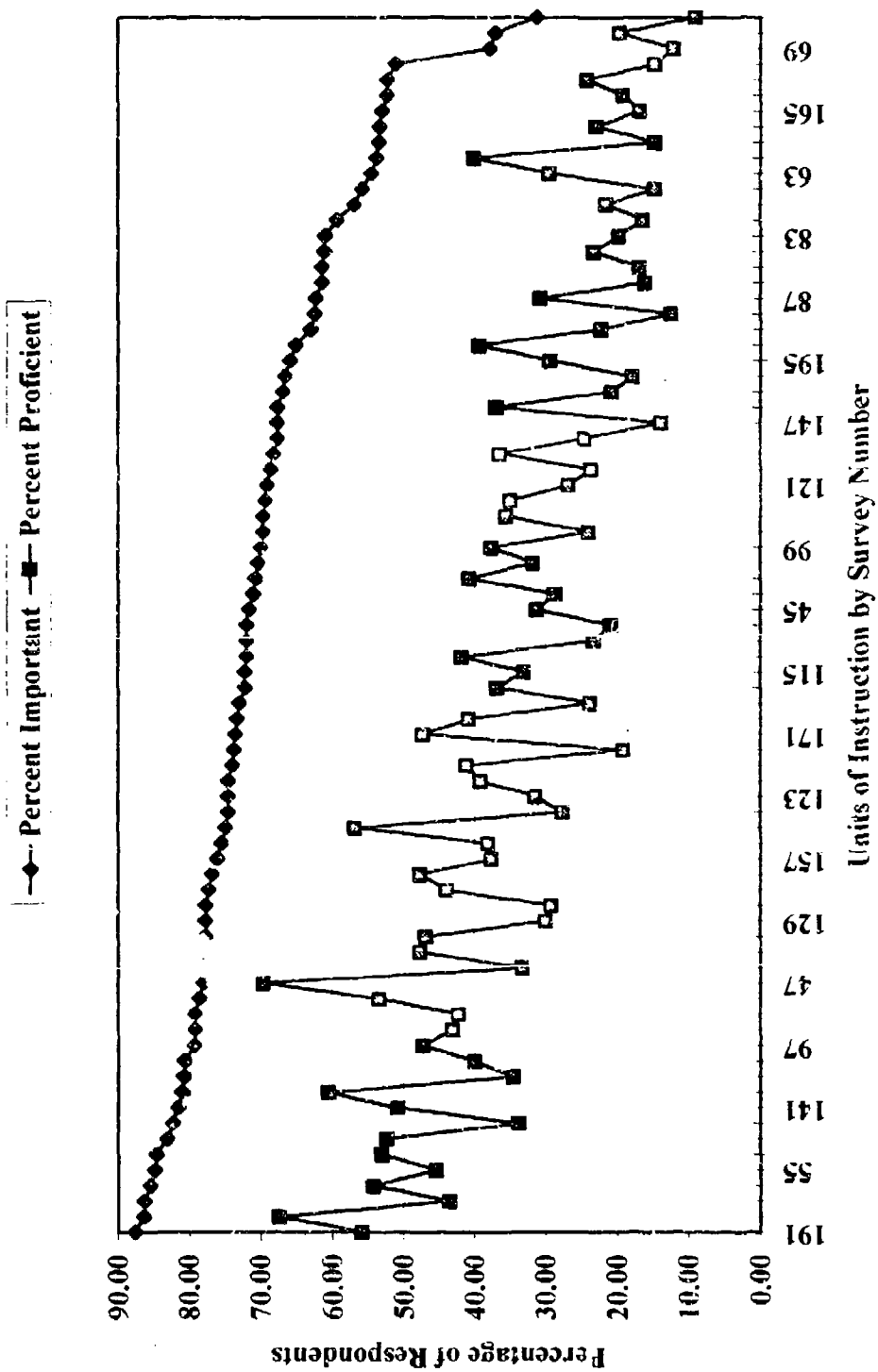


Figure D-2. Ranking of Units of Instruction by Importance - Level I Respondents

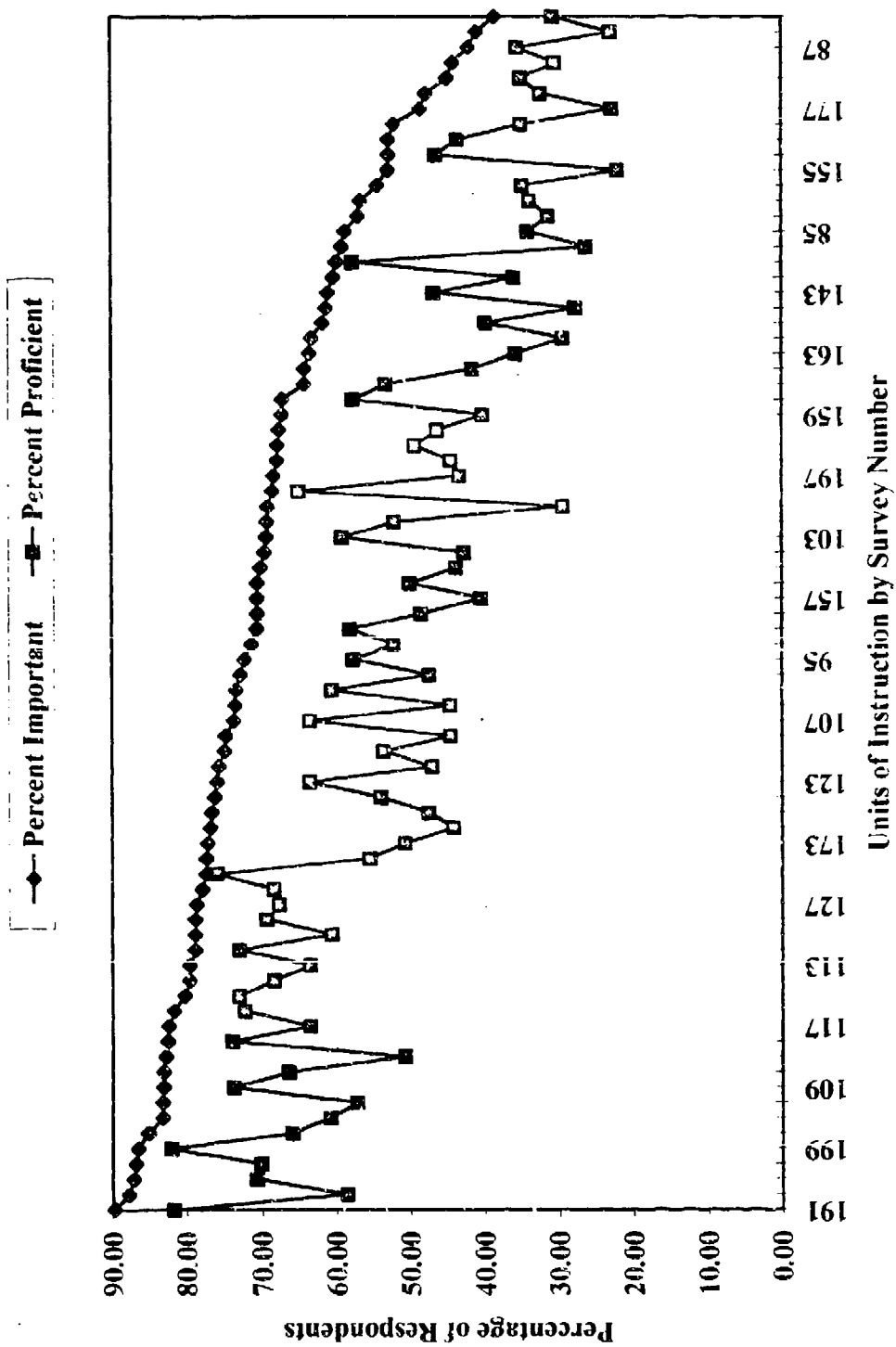


Figure D-3. Ranking of Units of Instruction by Importance - Level II Respondents

◆ Percent Important —□— Percent Proficient

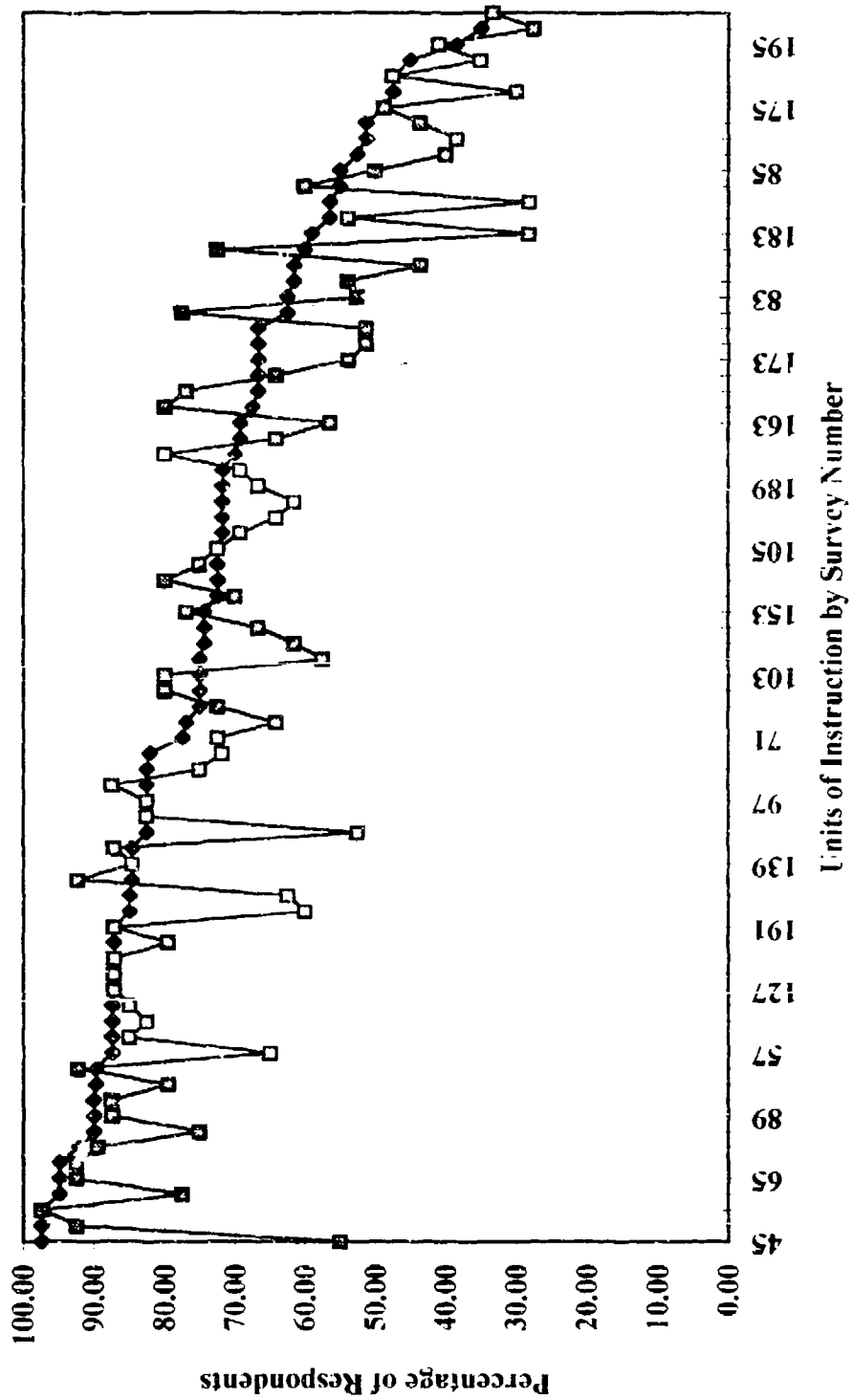


Figure D-4. Ranking of Units of Instruction by Importance - Level III Respondents

Table D-5. Comparison of Importance of Units of Instruction - Overall and Within Levels

Ranking		Question Number	Percent Important	Ranking		Question Number	Percent Important
Overall				Level I			
1	Contract Modifications/Options	191	88.53	1	Contract Modifications/Options	191	87.59
2	Competition Requirements	65	87.82	2	Competition Requirements	65	86.36
3	Statements of Work	55	87.50	3	Specifications	53	86.26
4	Ethics/Standards of Conduct	199	85.67	4	Solicitation Preparation (IFBs/RFPs)	89	85.49
5	Conducting Negotiations	131	85.29	5	Statements of Work	55	84.85
6	Solicitation Preparation (IFBs/RFPs)	89	84.79	6	Preparing Awards	139	84.62
7	Specifications	53	84.56	7	Responsiveness	109	83.07
8	Responsiveness	109	83.06	8	Conducting Negotiations	131	82.31
9	Negotiation Strategy	129	82.84	9	Awards	141	81.54
10	Method of Procurement	75	82.58	10	Ethics/Standards of Conduct	160	81.10
11	Preparing Awards	139	82.29	11	Technical Evaluations	113	80.77
12	Selection of Contract Type	79	81.55	12	Contract Administration Planning	149	80.76
13	Processing Proposals	111	81.44	13	Amending Solicitations	97	79.39
14	Responsibility	135	80.72	14	Processing Proposals	111	79.23
15	Awards	141	80.66	15	Responsibility	135	79.23
16	Technical Evaluations	113	80.46	16	Publicizing Proposed Procurements	91	78.62
17	Amending Solicitations	97	79.54	17	Purchase Requests	47	78.03
18	Price Objectives	115	79.48	18	Price Related Factors	71	78.03
19	Cost and Pricing Data	117	79.15	19	Bid Acceptance Periods	103	77.69
20	Publicizing Proposed Procurements	91	78.58	20	Processing Bids	101	77.69
21	Competitive Range	125	77.77	21	Negotiation Strategy	129	77.69
22	Acquisition Planning	45	77.34	22	Mistakes in Bids/Proposals	133	77.69
23	Price Related Factors	71	77.18	23	Method of Procurement	75	77.27
24	Fact-finding	127	77.05	24	Bid Prices	107	76.92
25	Contract Administration Planning	149	77.05	25	Monitoring, Inspection & Acceptance	157	76.16
26	Evaluating Other Terms & Conditions	123	76.47	26	Selection of Contract Type	79	75.57
27	Mistakes in Bids/Proposals	133	76.15	27	Sources of Supply/Services	59	75.00
28	Cost Analysis	121	75.90	28	Reporting Performance Problems	167	74.61
29	Protests	145	75.73	29	Evaluating Other Terms & Conditions	123	74.61
30	Terminations	193	74.76	30	Competitive Range	125	74.61
31	Processing Bids	101	74.60	31	Prebid/Preproposal Conferences	95	74.05
32	Technical Evaluation Factors	73	74.59	32	Protests	145	73.84
33	Funding Process	49	74.34	33	Invoices	171	73.64
34	Bid Prices	107	74.27	34	Funding Process	49	73.48
35	Bid Acceptance Periods	103	73.62	35	Cost and Pricing Data	117	73.08
36	Purchase Requests	47	73.07	36	Fact-finding	127	72.31
37	Prebid/Preproposal Conferences	95	73.05	37	Price Objectives	115	72.31
38	Unallowable Costs	173	72.70	38	Contract Close-outs	189	72.10
39	Reporting Performance Problems	167	72.55	39	Claims	197	72.09
40	Monitoring, Inspection & Acceptance	157	72.45	40	Terminations	193	72.00
41	Sources of Supply/Services	59	72.44	41	Acquisition Planning	45	71.75
42	Procurement/Source Selection Plans	77	71.84	42	Technical Evaluation Factors	73	71.21

Table D-5. Comparison of Importance of Units of Instruction - Overall and Within Levels (Continued)

43 Services Contracting Issues	57	71.47	43 Late Bids	105	70.77
44 Contract Close-outs	189	71.38	44 Services Contracting Issues	57	70.46
45 Claims	197	70.72	45 Canceling Solicitations (IFBs/RFPs)	99	70.00
46 Invoices	171	70.39	46 Unallowable Costs	173	69.77
47 Post-Award Orientations	151	69.74	47 Progress/Advance Payments	179	69.77
48 Ordering Against Contracts	153	69.51	48 Preaward Inquiries	93	69.46
49 Audits	119	69.28	49 Cost Analysis	121	69.23
50 Preaward Inquiries	93	69.15	50 Procurement/Source Selection Plans	77	68.69
51 Progress/Advance Payments	179	68.43	51 Post-Award Orientations	151	68.22
52 Late Bids	105	68.08	52 Delays	159	67.70
53 Delays	159	67.97	53 Fraud and Exclusion	147	67.69
54 Subcontracting Requirements	137	67.65	54 Ordering Against Contracts	153	67.69
55 Stop Work	161	66.34	55 Stop Work	161	66.93
56 Defective Pricing	187	65.34	56 Price and Fee Adjustments	181	66.66
57 Fraud and Exclusion	147	64.92	57 Bonds	195	65.89
58 Price and Fee Adjustments	181	64.80	58 Set-Asides	61	65.15
59 Canceling Solicitations (IFBs/RFPs)	99	64.14	59 Subcontracting Requirements	137	63.08
60 Remedies	163	63.40	60 Defective Pricing	187	62.50
61 Debriefing	143	62.62	61 Need for Bonds	87	62.31
62 Limitation of Costs	169	61.51	62 Audits	119	61.54
63 Set-Asides	61	60.57	63 Remedies	163	61.54
64 Contract Financing	83	58.25	64 Limitation of Costs	169	61.24
65 Accounting and Estimating Systems	183	57.71	65 Contract Financing	83	61.07
66 Cost Accounting Standards	185	57.38	66 Assignment of Claims	175	59.38
67 Assignment of Claims	175	56.76	67 Debriefing	143	56.92
68 Govnt Property & Supply Sources	85	55.99	68 Accounting and Estimating Systems	183	55.81
69 8(a) Procurements	63	54.81	69 8(a) Procurements	63	54.54
70 Property	165	54.57	70 Market Research	51	53.70
71 Bonds	195	54.28	71 Cost Accounting Standards	185	53.48
72 Consent to Subcontract	155	52.46	72 Govnt Property & Supply Sources	85	53.43
73 Forecasting Requirements	43	51.60	73 Property	165	53.07
74 Need for Bonds	87	50.98	74 Consent to Subcontract	155	52.30
75 Market Research	51	49.68	75 Forecasting Requirements	43	52.27
76 Collecting Contractor Debts	177	47.70	76 Collecting Contractor Debts	177	51.16
77 Letter Contracts	81	40.13	77 Lease Vs. Purchase	69	37.88
78 Unsolicited Proposal	67	39.10	78 Unsolicited Proposal	67	37.12
79 Lease Vs. Purchase	69	38.91	79 Letter Contracts	81	31.29

Table D-5. Comparison of Importance of Units of Instruction - Overall and Within Levels (Continued)

Ranking		Question Number	Percent Important	Ranking		Question Number	Percent Important
Level II				Level III			
1	Contract Modifications/Options	191	89.78	1	Acquisition Planning	45	97.50
2	Statements of Work	55	87.86	2	Method of Procurement	75	97.50
3	Competition Requirements	65	87.14	3	Ethics/Standards of Conduct	199	97.44
4	Conducting Negotiations	131	86.86	4	Statements of Work	55	95.00
5	Ethics/Standards of Conduct	199	86.56	5	Competition Requirements	65	95.00
6	Negotiation Strategy	129	85.19	6	Selection of Contract Type	79	95.00
7	Selection of Contract Type	79	83.33	7	Negotiation Strategy	129	92.11
8	Method of Procurement	75	83.33	8	Procurement/Source Selection Plans	77	90.00
9	Responsiveness	109	83.22	9	Solicitation Preparation (IFBs/RFPs)	89	90.00
10	Price Objectives	115	83.22	10	Price Objectives	115	90.00
11	Specifications	53	82.85	11	Protests	145	89.74
12	Solicitation Preparation (IFBs/RFPs)	89	82.60	12	Conducting Negotiations	131	89.74
13	Cost and Pricing Data	117	82.49	13	Services Contracting Issues	57	87.50
14	Processing Proposals	111	81.76	14	Processing Proposals	111	87.50
15	Responsibility	135	80.30	15	Cost and Pricing Data	117	87.50
16	Preparing Awards	139	79.61	16	Cost Analysis	121	87.50
17	Technical Evaluations	113	79.57	17	Fact-finding	127	87.18
18	Amending Solicitations	97	78.84	18	Responsibility	135	87.18
19	Cost Analysis	121	78.84	19	Awards	141	87.18
20	Competitive Range	125	78.84	20	Debriefing	143	87.18
21	Fact-finding	127	78.68	21	Contract Modifications/Options	191	87.18
22	Awards	141	77.94	22	Specifications	53	85.00
23	Publicizing Proposed Procurements	91	77.38	23	Technical Evaluation Factors	73	85.00
24	Mistakes in Bids/Proposals	133	77.38	24	Competitive Range	125	84.62
25	Unallowable Costs	173	77.20	25	Preparing Awards	139	84.62
26	Acquisition Planning	45	76.82	26	Evaluating Other Terms & Conditions	123	84.61
27	Terminations	193	76.65	27	Funding Process	49	82.50
28	Price Related Factors	71	76.26	28	Publicizing Proposed Procurements	91	82.50
29	Evaluating Other Terms & Conditions	123	75.92	29	Amending Solicitations	97	82.50
30	Contract Administration Planning	149	75.74	30	Responsiveness	109	82.50
31	Audits	119	75.00	31	Technical Evaluations	113	82.50
32	Technical Evaluation Factors	73	74.82	32	Reporting Performance Problems	167	82.05
33	Bid Prices	107	73.73	33	Price Related Factors	71	77.50
34	Protests	145	73.53	34	Terminations	193	76.93
35	Processing Bids	101	73.40	35	Sources of Supply/Services	59	75.00
36	Funding Process	49	72.86	36	Preaward Inquiries	93	75.00
37	Prebid/Preproposal Conferences	95	72.27	37	Bid Acceptance Periods	103	75.00
38	Invoices	171	71.32	38	Audits	119	75.00
39	Ordering Against Contracts	153	70.60	39	Claims	197	74.39
40	Post-Award Orientations	151	70.59	40	Subcontracting Requirements	137	74.36
41	Monitoring, Inspection & Acceptance	157	70.58	41	Ordering Against Contracts	153	74.36
42	Contract Close-outs	189	70.58	42	Purchase Requests	47	72.50

Table D-5. Comparison of Importance of Units of Instruction - Overall and Within Levels (Continued)

43 Subcontracting Requirements	137	70.08	43 Set-Asides	61	72.50
44 Procurement/Source Selection Plans	77	69.57	44 Prebid/Preproposal Conferences	95	72.50
45 Bid Acceptance Periods	103	69.35	45 Late Bids	105	72.50
46 Sources of Supply/Services	59	69.28	46 Contract Administration Planning	149	71.80
47 Defective Pricing	187	69.12	47 Post-Award Orientations	151	71.80
48 Purchase Requests	47	68.57	48 Stop Work	161	71.80
49 Claims	197	68.38	49 Contract Close-outs	189	71.79
50 Reporting Performance Problems	167	67.89	50 Delays	159	71.79
51 Services Contracting Issues	57	67.86	51 Processing Bids	101	70.00
52 Progress/Advance Payments	179	67.65	52 Price and Fee Adjustments	181	69.23
53 Delays	159	67.16	53 Remedies	163	69.23
54 Preaward Inquiries	93	67.16	54 Bid Prices	107	67.50
55 Late Bids	105	64.24	55 Mistakes in Bids/Proposals	133	66.67
56 Stop Work	161	64.24	56 Limitation of Costs	169	66.67
57 Remedies	163	63.51	57 Unallowable Costs	173	66.67
58 Fraud and Exclusion	147	63.23	58 Progress/Advance Payments	179	66.67
59 Price and Fee Adjustments	181	61.76	59 Monitoring, Inspection & Acceptance	157	66.66
60 Cost Accounting Standards	185	61.32	60 8(a) Procurements	63	62.50
61 Debriefing	143	61.03	61 Contract Financing	83	62.50
62 Limitation of Costs	169	60.30	62 Fraud and Exclusion	147	61.54
63 Canceling Solicitations (IFBs/RFPs)	99	59.86	63 Defective Pricing	187	61.54
64 Accounting and Estimating Systems	183	59.13	64 Canceling Solicitations (IFBs/RFPs)	99	60.00
65 Govnt Property & Supply Sources	85	58.70	65 Accounting and Estimating Systems	183	58.98
66 Property	165	56.94	66 Invoices	171	56.41
67 Assignment of Claims	175	56.62	67 Cost Accounting Standards	185	56.41
68 Contract Financing	83	54.35	68 Letter Contracts	81	55.00
69 Consent to Subcontract	155	52.95	69 Govnt Property & Supply Sources	85	55.00
70 8(a) Procurements	63	52.86	70 Market Research	51	52.50
71 Set-Asides	61	52.85	71 Property	165	51.29
72 Forecasting Requirements	43	52.15	72 Consent to Subcontract	155	51.28
73 Collecting Contractor Debts	177	48.53	73 Assignment of Claims	175	48.72
74 Bonds	195	47.79	74 Forecasting Requirements	43	47.50
75 Market Research	51	45.00	75 Unsolicited Proposal	67	47.50
76 Letter Contracts	81	44.20	76 Need for Bonds	87	45.00
77 Need for Bonds	87	42.03	77 Bonds	195	38.47
78 Lease Vs. Purchase	69	41.91	78 Lease Vs. Purchase	69	35.00
79 Unsolicited Proposal	67	38.58	79 Collecting Contractor Debts	177	33.33

Table D-6. Rank Order Correlations of Competencies

Ranking	Question Number	Correlation	Ranking	Question Number	Correlation
1	57 Services Contracting Issues	0.61	1	59 Sources of Supply/Services	0.59
2	59 Sources of Supply/Services	0.61	2	57 Services Contracting Issues	0.53
3	91 Publicizing Proposed Procurements	0.56	3	199 Ethics/Standards of Conduct	0.52
4	87 Need for Bonds	0.55	4	171 Invoices	0.50
5	199 Ethics/Standards of Conduct	0.54	5	51 Market Research	0.50
6	75 Method of Procurement	0.54	6	87 Need for Bonds	0.50
7	65 Competition Requirements	0.53	7	157 Monitoring, Inspection & Acceptance	0.49
8	171 Invoices	0.53	8	47 Purchase Requests	0.49
9	47 Purchase Requests	0.53	9	141 Awards	0.48
10	103 Bid Acceptance Periods	0.50	10	103 Bid Acceptance Periods	0.47
11	107 Bid Prices	0.50	11	65 Competition Requirements	0.47
12	153 Ordering Against Contracts	0.50	12	91 Publicizing Proposed Procurements	0.47
13	101 Processing Bids	0.50	13	107 Bid Prices	0.45
14	109 Responsiveness	0.50	14	135 Responsibility	0.45
15	67 Unsolicited Proposal	0.50	15	43 Forecasting Requirements	0.44
16	141 Awards	0.49	16	55 Statements of Work	0.44
17	71 Price Related Factors	0.49	17	105 Late Bids	0.43
18	111 Processing Proposals	0.49	18	75 Method of Procurement	0.43
19	135 Responsibility	0.49	19	101 Processing Bids	0.43
20	97 Amending Solicitations	0.48	20	109 Responsiveness	0.43
21	195 Bonds	0.48	21	195 Bonds	0.42
22	149 Contract Administration Planning	0.48	22	179 Progress/Advance Payments	0.42
23	83 Contract Financing	0.48	23	153 Ordering Against Contracts	0.41
24	105 Late Bids	0.48	24	67 Unsolicited Proposal	0.41
25	81 Letter Contracts	0.48	25	83 Contract Financing	0.40
26	51 Market Research	0.48	26	127 Fact-finding	0.40
27	157 Monitoring, Inspection & Acceptance	0.48	27	49 Funding Process	0.40
28	127 Fact-finding	0.47	28	71 Price Related Factors	0.40
29	43 Forecasting Requirements	0.47	29	89 Solicitation Preparation (IFBs/RFPs)	0.40
30	77 Procurement/Source Selection Plans	0.47	30	169 Limitation of Costs	0.39
31	89 Solicitation Preparation (IFBs/RFPs)	0.47	31	151 Post-Award Orientations	0.38
32	93 Preaward Inquiries	0.46	32	97 Amending Solicitations	0.37
33	139 Preparing Awards	0.46	33	159 Delays	0.37
34	125 Competitive Range	0.45	34	167 Reporting Performance Problems	0.37
35	159 Delays	0.45	35	161 Stop Work	0.37
36	85 Govnt Property & Supply Sources	0.45	36	149 Contract Administration Planning	0.36
37	151 Post-Award Orientations	0.45	37	139 Preparing Awards	0.36
38	95 Prebid/Preproposal Conferences	0.45	38	63 8(a) Procurements	0.35
39	69 Lease Vs Purchase	0.44	39	191 Contract Modifications Options	0.35
40	169 Limitation of Costs	0.44	40	165 Property	0.35
41	115 Price Objectives	0.44	41	163 Remedies	0.35
42	79 Selection of Contract Type	0.44	42	125 Competitive Range	0.34

Table D-6. Rank Order Correlations of Competencies (Continued)

43	143 Debriefing	0.43	43	85 Govnt Property & Supply Sources	0.34
44	55 Statements of Work	0.43	44	111 Processing Proposals	0.34
45	161 Stop Work	0.43	45	137 Subcontracting Requirements	0.34
46	113 Technical Evaluations	0.43	46	155 Consent to Subcontract	0.33
47	63 8(a) Procurements	0.42	47	69 Lease Vs. Purchase	0.33
48	61 Set-Asides	0.42	48	81 Letter Contracts	0.33
49	123 Evaluating Other Terms & Conditions	0.41	49	93 Preaward Inquiries	0.33
50	179 Progress/Advance Payments	0.41	50	77 Procurement/Source Selection Plans	0.33
51	137 Subcontracting Requirements	0.41	51	61 Set-Asides	0.33
52	197 Claims	0.40	52	99 Canceling Solicitations (IFBs/RFPs)	0.32
53	191 Contract Modifications/Options	0.40	53	129 Negotiation Strategy	0.32
54	167 Reporting Performance Problems	0.40	54	115 Price Objectives	0.32
55	99 Canceling Solicitations (IFBs/RFPs)	0.39	55	53 Specifications	0.32
56	165 Property	0.39	56	95 Prebid/Preproposal Conferences	0.31
57	163 Remedies	0.39	57	79 Selection of Contract Type	0.31
58	117 Cost and Pricing Data	0.38	58	197 Claims	0.29
59	49 Funding Process	0.38	59	131 Conducting Negotiations	0.29
60	53 Specifications	0.38	60	117 Cost and Pricing Data	0.28
61	73 Technical Evaluation Factors	0.38	61	73 Technical Evaluation Factors	0.28
62	155 Consent to Subcontract	0.37	62	113 Technical Evaluations	0.28
63	129 Negotiation Strategy	0.37	63	123 Evaluating Other Terms & Conditions	0.25
64	183 Accounting and Estimating Systems	0.35	64	143 Debriefing	0.24
65	175 Assignment of Claims	0.35	65	193 Terminations	0.24
66	121 Cost Analysis	0.35	66	189 Contract Close-outs	0.23
67	181 Price and Fee Adjustments	0.35	67	133 Mistakes in Bids/Proposals	0.22
68	131 Conducting Negotiations	0.34	68	173 Unallowable Costs	0.22
69	189 Contract Close-outs	0.32	69	183 Accounting and Estimating Systems	0.21
70	133 Mistakes in Bids/Proposals	0.32	70	121 Cost Analysis	0.21
71	193 Terminations	0.32	71	45 Acquisition Planning	0.18
72	173 Unallowable Costs	0.32	72	181 Price and Fee Adjustments	0.18
73	119 Audits	0.31	73	185 Cost Accounting Standards	0.15
74	177 Collecting Contractor Debts	0.27	74	175 Assignment of Claims	0.14
75	185 Cost Accounting Standards	0.27	75	187 Defective Pricing	0.12
76	145 Protests	0.25	76	145 Protests	0.12
77	187 Defective Pricing	0.24	77	177 Collecting Contractor Debts	0.10
78	45 Acquisition Planning	0.23	78	119 Audits	0.09
79	147 Fraud and Exclusion	0.17	79	147 Fraud and Exclusion	0.09

Table D-6. Rank Order Correlations of Competencies (Continued)

Ranking	Question Number	Correlation	Ranking	Question Number	Correlation
Level II			Level III		
1	57 Services Contracting Issues	0.71	1	141 Awards	0.84
2	91 Publicizing Proposed Procurements	0.69	2	139 Preparing Awards	0.83
3	149 Contract Administration Planning	0.63	3	89 Solicitation Preparation (IFBs/RFPs)	0.82
4	109 Responsiveness	0.63	4	135 Responsibility	0.81
5	87 Need for Bonds	0.62	5	97 Amending Solicitations	0.80
6	111 Processing Proposals	0.62	6	111 Processing Proposals	0.80
7	59 Sources of Supply/Services	0.62	7	171 Invoices	0.79
8	107 Bid Prices	0.61	8	153 Ordering Against Contracts	0.79
9	93 Preaward Inquiries	0.61	9	199 Ethics/Standards of Conduct	0.78
10	101 Processing Bids	0.61	10	91 Publicizing Proposed Procurements	0.78
11	97 Amending Solicitations	0.60	11	149 Contract Administration Planning	0.77
12	105 Late Bids	0.59	12	191 Contract Modifications/Options	0.77
13	153 Ordering Against Contracts	0.59	13	113 Technical Evaluations	0.77
14	77 Procurement/Source Selection Plans	0.59	14	137 Subcontracting Requirements	0.75
15	195 Bonds	0.58	15	123 Evaluating Other Terms & Conditions	0.74
16	65 Competition Requirements	0.58	16	67 Unsolicited Proposal	0.74
17	85 Govnt Property & Supply Sources	0.58	17	93 Preaward Inquiries	0.73
18	75 Method of Procurement	0.58	18	125 Competitive Range	0.72
19	89 Solicitation Preparation (IFBs/RFPs)	0.58	19	159 Delays	0.72
20	95 Prebid/Preproposal Conferences	0.57	20	169 Limitation of Costs	0.72
21	71 Price Related Factors	0.57	21	133 Mistakes in Bids/Proposals	0.72
22	103 Bid Acceptance Periods	0.56	22	151 Post-Award Orientations	0.72
23	83 Contract Financing	0.56	23	71 Price Related Factors	0.72
24	139 Preparing Awards	0.56	24	115 Price Objectives	0.71
25	125 Competitive Range	0.55	25	59 Sources of Supply/Services	0.70
26	199 Ethics/Standards of Conduct	0.55	26	161 Stop Work	0.69
27	47 Purchase Requests	0.55	27	145 Protests	0.68
28	81 Letter Contracts	0.54	28	131 Conducting Negotiations	0.67
29	79 Selection of Contract Type	0.54	29	143 Debriefing	0.67
30	113 Technical Evaluations	0.54	30	87 Need for Bonds	0.67
31	175 Assignment of Claims	0.53	31	69 Lease Vs. Purchase	0.66
32	99 Canceling Solicitations (IFBs/RFPs)	0.53	32	47 Purchase Requests	0.66
33	67 Unsolicited Proposal	0.53	33	163 Remedies	0.66
34	197 Claims	0.52	34	83 Contract Financing	0.65
35	123 Evaluating Other Terms & Conditions	0.52	35	193 Terminations	0.64
36	171 Invoices	0.52	36	121 Cost Analysis	0.63
37	151 Post-Award Orientations	0.52	37	181 Price and Fee Adjustments	0.63
38	135 Responsibility	0.52	38	81 Letter Contracts	0.62
39	63 8(a) Procurements	0.51	39	175 Assignment of Claims	0.61
40	61 Set-Asides	0.51	40	65 Competition Requirements	0.61
41	159 Delays	0.50	41	95 Prebid/Preproposal Conferences	0.61
42	43 Forecasting Requirements	0.50	42	197 Claims	0.60

Table D-6. Rank Order Correlations of Competencies (Continued)

43	69	Lease Vs. Purchase	0.50	43	85	Govnt Property & Supply Sources	0.59
44	141	Awards	0.49	44	75	Method of Procurement	0.59
45	127	Fact-finding	0.49	45	179	Progress/Advance Payments	0.59
46	143	Debriefing	0.48	46	109	Responsiveness	0.59
47	51	Market Research	0.48	47	55	Statements of Work	0.59
48	157	Monitoring, Inspection & Acceptance	0.48	48	195	Bonds	0.58
49	73	Technical Evaluation Factors	0.48	49	127	Fact-finding	0.58
50	161	Stop Work	0.47	50	103	Bid Acceptance Periods	0.57
51	169	Limitation of Costs	0.46	51	187	Defective Pricing	0.57
52	181	Price and Fee Adjustments	0.46	52	99	Canceling Solicitations (IFBs/RFPs)	0.56
53	165	Property	0.46	53	129	Negotiation Strategy	0.56
54	167	Reporting Performance Problems	0.46	54	167	Reporting Performance Problems	0.56
55	173	Unallowable Costs	0.46	55	155	Consent to Subcontract	0.55
56	183	Accounting and Estimating Systems	0.45	56	157	Monitoring, Inspection & Acceptance	0.55
57	177	Collecting Contractor Debts	0.45	57	49	Funding Process	0.54
58	115	Price Objectives	0.45	58	101	Processing Bids	0.53
59	191	Contract Modifications Options	0.44	59	43	Forecasting Requirements	0.51
60	117	Cost and Pricing Data	0.44	60	53	Specifications	0.51
61	53	Specifications	0.44	61	183	Accounting and Estimating Systems	0.49
62	137	Subcontracting Requirements	0.43	62	185	Cost Accounting Standards	0.49
63	119	Audits	0.42	63	57	Services Contracting Issues	0.47
64	189	Contract Close-outs	0.42	64	107	Bid Prices	0.46
65	121	Cost Analysis	0.41	65	147	Fraud and Exclusion	0.46
66	133	Mistakes in Bids/Proposals	0.41	66	51	Market Research	0.45
67	49	Funding Process	0.40	67	173	Unallowable Costs	0.45
68	163	Remedies	0.40	68	189	Contract Close-outs	0.41
69	55	Statements of Work	0.40	69	105	Late Bids	0.41
70	155	Consent to Subcontract	0.39	70	61	Set-Asides	0.40
71	129	Negotiation Strategy	0.39	71	177	Collecting Contractor Debts	0.39
72	179	Progress/Advance Payments	0.39	72	165	Property	0.39
73	193	Terminations	0.38	73	119	Audits	0.37
74	185	Cost Accounting Standards	0.34	74	79	Selection of Contract Type	0.37
75	131	Conducting Negotiations	0.31	75	117	Cost and Pricing Data	0.34
76	187	Defective Pricing	0.29	76	63	3(a) Procurements	0.32
77	145	Protests	0.28	77	77	Procurement/Source Selection Plans	0.31
78	45	Acquisition Planning	0.24	78	73	Technical Evaluation Factors	0.30
79	147	Fraud and Exclusion	0.22	79	45	Acquisition Planning	0.18

Appendix E: Open Ended Questions

This appendix reports the responses to the opened ended questions by an index of response categories, a ranking of responses by categories, and a sanitized listing of the responses.

Open Ended Question 1: How do you view the certification program? (See note 1 below.)

Open Ended Question 2: Is there anything additional you would like to add pertaining to the certification program and its relationship to a mission ready professional workforce. (See note 1 below.)

Open Ended Question 3: What training class or classes, either mandatory or non-mandatory, have you attended that you thought were most or least beneficial to you in the performance of your job? Also, indicate why the classes were most or least beneficial.

Open Ended Question 4: Is there anything additional that you would like to add, pertaining to the training portion of the certification program or about training in general. (See note 1 below.)

Open Ended Question 5: What additional areas of instruction do you think need to be added or deleted? (See Note 2 below.)

Note 1: Responses to questions 1, 2 and 4 were combined because respondents did not always answer the specific question being asked. Often, responses contained many distinct and separate thoughts, ideas, or opinions, many of which answered more than one question at a time.

Note 2: Open ended question 5 was not evaluated due to lack of responses.

Table E-1. Index of Response Categories

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Table E-2. Questions 1, 2, and 4 - Ranking of Responses

	Responses	Ranking
I. Certification Program Satisfaction and Importance		
1.0 Program is Necessary and/or Needed	10	13
2.0 Program is Perceived as Having Value/Worth	45	1
3.0 Program is a Good Start Towards a Professional Workforce	16	8
4.0 Program is Meeting the Goal to Improve the Workforce	12	11
5.0 Program Provides Positive Changes and Improvements	7	15
6.0 Importance of the Certification Program Standards	6	16
6.1 Importance of Experience	22	4
6.2 Importance of Training	7	15
6.3 Importance of Education	6	16
II. Certification Program Dissatisfaction and Concerns		
1.0 Program is Meaningless/Unimportant	18	6
2.0 Program is Not Meeting its Intended Purpose	11	12
3.0 Program is a Waste of Resources	5	17
4.0 Program Keeps Changing	4	18
5.0 Program Does Not Reflect Ability to Perform the Job	17	7
5.1 Higher Education Does Not Equate to Ability to Perform the Job	14	9
6.0 Program Standards are Too Low	12	11
6.1 Experience Requirements are Too Low	28	2
6.2 Education Requirements are Too Low	13	10
7.0 Enlisted Concerns About the Certification Program	8	14
8.0 Other Comments & Concerns Pertaining to the Certification Program	19	20
III. Certification Program and Established Standards		
1.0 Experience Standards - Comments and Concerns	8	14
2.0 Training Standards - Comments and Concerns	16	8
2.1 Training Availability	21	5
2.2 Training Applicability	24	3
2.3 Training Needs and Suggestions	28	2
2.4 On-The-Job Training	6	16
2.5 Refresher/Follow-on Training	4	18
3.0 Education Standards - Comments and Concerns	5	17
3.1 Education Funding Issues	4	18
3.2 Education Discipline Concerns	3	19
3.3 Dissatisfaction with Education Requirements	3	19

Table E-3. Question 3 - Ranking of Responses

	Responses	Ranking
IV. Training Courses Perceived Most Beneficial		
Level I Courses		
Management of Defense Acquisition Contracts - Basic	20	2
Central Systems Level Contracting	3	7
Operational Contracting Fundamentals	4	6
Principles of Contract Pricing	10	4
Base Level Pricing	5	5
Defense Cost and Price Analysis/Negotiation	2	8
Level II Courses		
Government Contract Law	23	1
Intermediate Pricing	2	8
Management of Defense Acquisition Contracts - Advanced	13	3
Contract Administration - Advanced	13	3
Base Contract Administration	5	5
Contract Overhead Management	3	7
Level III Courses		
Defense Acquisition Contracting Executive Seminar	2	8
Others Cited		
Value Engineering	1	9
Negotiation Workshop	2	8
Contract Placement	4	6
Property Management	1	9
QAE Coordination	1	9

Table E-4. Question 3 - Ranking of Responses

	Responses	Ranking
IV. Training Courses Perceived Least Beneficial		
Level I Courses		
Management of Defense Acquisition Contracts - Basic	10	1
Operational Contracting Fundamentals	3	4
Principles of contract Pricing	8	2
Base Level Pricing	1	6
Defense Cost and Price Analysis/Negotiation	2	5
Level II Courses		
Government Contract Law	10	1
Intermediate Pricing	1	6
Management of Defense Acquisition Contracts - Advanced	6	3
Contract Administration - Advanced	1	6
Contract Overhead Management	1	6
Level III courses		
Defense Acquisition Contracting Executive Seminar	1	6
Management of Defense Acquisition contracts - Executive	2	5
Others Cited		
Value Engineering	1	6
Negotiation Workshop	1	6
Contract Placement	1	6
Environmental Contracting	1	6

Table E-5. Comments to Open Ended Questions

I. CERTIFICATION PROGRAM SATISFACTION AND IMPORTANCE

1.0 PROGRAM IS NECESSARY AND/OR NEEDED

No.	Demographics	Comments
17244	- - 3 6 6 5 1 3 3 5	Certification is a must.
17289	- 5 - 4 4 3 1 6 3 2	It has been needed for a long time.
17293	- - 3 4 4 3 1 2 3 2	Essential.
17298	- - 4 4 4 1 1 6 3 4	Required
17340	- - 5 5 7 6 1 4 4 7	A needed instrument to improve the work force.
17459	2 - - 4 2 2 2 6 3 2	Necessary to ensure classes are attended.
17684	4 - - 5 4 5 1 7 4 4	Necessary to insure a professional work force.
17691	- - 2 3 4 1 1 3 1 2	Needed for quite some time.
17702	3 - - 5 4 4 1 7 3 5	A change was needed and its better than before
17739	- 6 - 4 4 5 1 6 3 7	Necessary requirements to meet the ever changing ways we do business

2.0 PROGRAM IS PERCEIVED AS HAVING VALUE/WORTH

No.	Demographics	Comments
17214	- - 4 3 7 7 2 1 3 1	Great.
17220	- - 3 1 7 5 1 2 3 2	Good idea.
17228	- - 5 6 4 5 1 5 3 5	Good Idea.
17229	- - 2 4 4 1 1 2 1 2	Good Program.
17230	- - 4 4 5 1 1 6 3 1	I am happy to see the certification program.
17235	- - 4 4 7 1 1 5 3 5	The certification program is an excellent idea
17237	- - 2 4 3 1 1 2 3 2	It's a good program. I don't believe APDP and DAWLA have been stressed enough.
17246	- - 4 4 5 2 1 5 3 2	Program has good intentions.
17254	- - 3 2 3 1 1 4 1 2	I like certification requirements.
17270	- 2 - 2 3 1 1 2 1 2	I think it's a good program -- it motivates people to get the college classes they need and that they usually have wanted but they were just procrastinating. This gives them a little "push."
17273	- 4 - 2 4 1 1 3 1 2	Very Good.
17284	- - 3 4 2 1 1 2 1 2	Effective.
17286	4 - - 5 4 4 1 7 3 7	Good.
17305	- 4 - 3 4 4 1 6 3 2	It is a good program. I feel everyone who meets the requirements is qualified for a certificate or warrant
17313	4 - - 5 4 5 2 7 4 4	The program is basically sound.
17316	- - 5 4 5 5 1 4 3 4	I agree with the concept of a certification program

Table E-5. Comments to Open Ended Questions (Continued)

17332	6	-	-	4	4	4	1	2	4	7	Since I have only been with the Federal Government for 10 years, it is fine for me.
17346	1	-	-	4	1	1	1	1	1	3	It is well structured.
17473	1	-	-	6	2	4	1	7	2	2	O.K.
17485	-	3	-	2	4	4	1	6	1	2	O.K.
17493	-	3	-	4	4	6	1	3	2	2	It's very good.
17499	-	4	-	4	5	2	1	3	3	2	I believe it is a better program than the skill levels previously used.
17566	2	-	-	4	2	1	1	3	1	2	It's fine.
17596	-	-	1	3	2	3	1	2	1	4	I agree with the certification program.
17615	-	-	3	5	4	1	1	6	3	2	The certification is a good grounding.
17626	3	-	-	5	4	5	2	7	3	2	It is a well focused program.
17628	3	-	-	5	4	4	1	7	4	7	Overall very good.
17630	4	-	-	5	4	4	2	7	3	5	I am satisfied with the APDP program
17642	-	-	7	6	7	6	1	2	4	1	Positive.
17644	-	3	-	2	2	5	1	3	2	1	Idea is good.
17646	-	-	4	2	6	3	1	6	3	2	Overall, its fine.
17653	-	-	5	5	6	1	1	4	4	3	O.K.
17655	-	-	2	4	3	1	1	3	2	2	I think the certification program is an excellent idea.
17657	2	-	-	4	1	1	1	7	1	2	Seems adequate and well balanced between the three requirements.
17665	-	-	5	4	5	5	1	1	4	3	A very good idea to encourage training of all personnel and education.
17666	-	-	4	4	4	1	1	6	3	3	Overall, good.
17667	-	-	5	6	7	6	2	7	4	2	Good.
17683	-	-	5	5	4	5	1	1	3	1	Good.
17687	5	-	-	5	4	7	1	1	3	2	Adequate.
17688	-	-	2	2	4	1	1	2	2	2	I think the program is great.
17698	3	-	-	5	2	1	1	1	2	1	O.K.
17699	-	5	-	4	6	5	1	6	3	2	A very worthwhile program.
17721	-	-	5	5	5	2	1	4	4	2	Good tool, much further ahead than other services
17740	-	-	2	4	5	1	1	2	3	2	Certification program is excellent.
17768	3	-	-	6	2	1	1	1	2	1	Good - sets standards.

3.0 PROGRAM IS A GOOD START TOWARDS A PROFESSIONAL WORKFORCE

No.	Demographics	Comments
17237	- - 2 4 3 1 1 2 3 2	It's a positive step toward a well trained, well educated work force and that is what it is going to stay competitive in this time of base closures and downsizing.

Table E-5. Comments to Open Ended Questions (Continued)

17256	- 2 - 2 2 1 1 2 2 2	I feel that the APDP certification program is not by any stretch of the imagination perfect, but is a step in the right direction.
17274	- 4 - 4 5 5 1 6 3 2	It's a good start in the right direction.
17318	1 - - 4 1 1 1 3 1 2	The program is definitely headed in the right direction
17535	- 5 - 4 5 4 2 7 3 6	A process, once refined, that will enhance the ability of government procurement individuals to protect the government's interest in confidence.
17536	- 4 - 3 5 3 1 2 2 6	The current certification program is only the first draft.
17615	- - 3 5 4 1 1 6 3 2	It is a step in the right direction.
17624	3 - - 5 4 5 2 7 3 2	A step in the right direction.
17627	- - 5 5 5 5 1 6 3 2	It is a step in the right direction.
17643	- - 7 6 7 5 1 2 4 1	I view it as a significant part of what is needed to ensure a professional work force capable of providing effective customer support. It is not the complete answer
17654	- - 4 4 6 2 1 7 3 4	It is a good start by at least having certain requirements. some seem low, but maybe in the future they can be raised.
17664	- - 4 5 4 1 1 5 3 2	One small step for contracting in one giant bureaucratic nightmare.
17673	4 - - 6 3 7 1 7 3 5	Good start towards professional development of the acquisition corps.
17696	- - 7 5 6 6 2 7 4 7	Positive step to escalate acquisition.
17702	3 - - 5 4 4 1 7 3 5	Through people's input the system can be "fine tuned" as we go along to better prepare individuals for a professional work force.
17715	- - 3 4 3 1 1 2 2 5	I do not believe it has all the "bugs" worked out yet. It seems that every base is getting different information to the workers.
4.0 PROGRAM IS MEETING THE GOAL TO IMPROVE THE WORKFORCE		
No.	Demographics	Comments
17220	- - 3 1 7 5 1 2 3 2	Improving the professionals of the work force.
17221	- - 4 5 4 1 1 6 3 3	Improving the professionals of the work force.
17235	- - 4 4 7 1 1 5 3 5	It will provide educated, experienced and well trained contracting and acquisition representatives.
17243	- - 4 4 4 1 1 3 3 4	The certification is important in maintaining a high standard of professionalism for contracting personnel.
17273	- 4 - 2 4 1 1 3 1 2	By setting minimum requirements to be certified, you have a more educated and experienced person making better decisions. They are also better qualified to guide younger, less experienced contracting personnel in the right direction

Table E-5. Comments to Open Ended Questions (Continued)

17348	-	-	1	2	4	1	1	2	2	1	Certification program is a good plan to ensure proper experience, training and education of contracting professionals.
17491	-	1	-	3	2	1	1	2	2	2	It weeds out the individuals who don't really want to work in contracting.
17551	-	-	2	4	2	1	1	3	1	5	I am glad that the program has come about to professionalize this very technical career field.
17563	-	-	3	5	4	4	1	2	3	2	Method of ensuring contracting personnel are trained and have an academic education.
17651	-	-	2	4	3	1	1	2	1	2	This program incorporates three main factors to produce the best employees and work productivity.
17652	-	5	-	3	4	5	1	3	3	2	The program is a great idea and will ensure a trained work force at the intermediate and higher levels.
17763	3	-	-	5	3	5	1	7	3	1	Certification ensures that personnel receive the necessary necessary training to complete their jobs.
5.0 PROGRAM PROVIDES POSITIVE CHANGES AND IMPORVEMENTS											
No.	Demographics										Comments
17247	-	-	4	3	6	4	1	7	4	2	As a result of the program, training is more equally distributed throughout the work force which eliminates or reduces the selective training scheduling which previously occurred.
17268	-	2	-	2	3	1	1	3	1	2	I think it's good because now we can go to TDY classes more often to get the training and education to perform our jobs better.
17346	1	-	-	4	1	1	1	1	1	3	By knowing one's level you have a good idea at how much experience they have.
17559	-	-	3	3	4	2	1	3	3	2	The certification program allows everyone to be on the same playing field. It allows individuals to prepare themselves to meet the certification levels required for their positions.
17628	3	-	-	5	4	4	1	7	4	7	Clearly states the requirements so everyone knows what is required of them in the career field.
17630	4	-	-	5	4	4	2	7	3	5	I am certain that we would not have provided so many excellent courses to so many people if it were not for DAWIA.
17644	-	3	-	2	2	5	1	3	2	1	Thanks to this program, me and my coworkers are finally able to go to school for formal training. Prior to this, school quotas were not accessible or available. Local training only applies to the CO's interpretation - which opinions change daily. Teach us the books.

Table E-5. Comments to Open Ended Questions (Continued)

6.0 IMPORTANCE OF THE CERTIFICATION PROGRAM STANDARDS												
No.	Demographics									Comments		
17311	-	-	5	2	6	7	2	6	4	3	Training and experience should be at the heart of any certification program.	
17313	4	-	-	5	4	5	2	7	4	4	Training and experience are, in my estimation, co-equals. They are both needed to make the whole contracting professional. Though training was selected as most important for item 15, experience could have also been my choice.	
17464	-	-	1	5	1	1	1	2	1	2	In reality, all three elements are needed to ensure a quality work force. Each element contributes to the knowledge needed.	
17625	-	-	5	5	7	6	1	2	4	4	While selecting experience as most important, I feel training and education are equally important.	
17657	2	-	-	4	1	1	1	7	1	2	I think that someone just getting into the acquisition field should already meet the education requirements, and have taken the necessary training courses prior to actual experience.	
17699	-	5	-	4	6	5	1	6	3	2	I would rank the elements as experience, education then training.	
6.1 IMPORTANCE OF EXPERIENCE												
No.	Demographics									Comments		
17238	-	-	4	6	6	1	1	5	3	1	There is no replacement for experience. Experience contains knowledge not achievable in the classroom.	
17260	-	-	2	1	4	5	1	2	1	2	I feel experience is the greatest factor in job proficiency.	
17265	-	2	-	2	2	3	1	2	1	2	People learn more from experience and "on-hands" learning.	
17281	-	2	-	2	3	1	1	3	1	2	It should be centered more around experience.	
17298	-	-	4	4	4	1	1	6	3	4	Experience is by doing, not from a book.	
17299	-	-	4	4	7	4	1	6	3	7	It is less important to be career broadened ("pogoing" a few months here and a few months there) than it is to dig in, spend time and really learn a particular area and then move on.	
17302	-	-	5	4	6	7	1	4	4	1	Experience out weights most degree programs, particularly when those degrees were achieved with very low GPAs.	
17309	-	-	5	4	6	5	1	2	4	3	Hands-on experience is the only way to develop contracting skills.	
17340	-	-	5	5	7	6	1	4	4	7	Longer "hands-on" experience for each trainee.	

Table E-5. Comments to Open Ended Questions (Continued)

17494	-	3	-	2	4	1	1	2	3	3	I believe experience is extremely important role. A two year SSgt cross trainee does not have the same knowledge experience and probably can not handle difficult acquisitions as a 5 to 10 year experienced SSgt.
17522	-	3	-	3	5	3	1	7	3	6	Should be equally weighed between training and experience.
17530	-	-	3	2	5	7	2	6	3	3	Too easily training certification surpasses experience and leave a void in job knowledge really needed. College isn't as important as currently weighted and experience should be more, there should be a leveling off between the two.
17544	-	-	2	2	5	2	1	3	3	2	New ideas are good, but, job experience and know how are much more important.
17622	-	-	5	5	6	5	2	7	4	2	Experience and mobility are the keys.
17638	-	-	6	4	7	5	1	2	4	7	I believe experience is the most important teacher.
17639	-	-	5	4	5	5	1	5	4	7	Experience is what makes a good contracting person.
17643	-	-	7	6	7	5	1	2	4	1	Quality of experience, quality of the individual, regardless of whether they have attained certification are keys.
17658	-	-	1	2	4	5	1	3	2	2	Frequently the expertise required at the operational level is above that achieved.
17665	-	-	5	4	5	5	1	1	4	3	These are areas that need to be emphasized, but experience is the most important factor. You can have a degree and all kinds of courses, but without the hours of experience you can't be very knowledgeable or effective.
17699	-	5	-	4	6	5	1	6	3	2	You cannot under estimate experience from the ground up, working in the trenches.
17700	-	-	4	2	6	4	1	1	1	4	Experience should carry more weight than degree requirements.
17722	5	-	-	6	5	7	2	7	4	7	Training and most certainly education can't take the place of experience.
6.2 IMPORTANCE OF TRAINING											
No.	Demographics										Comments
12292	-	-	4	4	4	1	1	2	3	1	Required courses are adequate in subject and number for the certification program.
17464	-	-	1	5	1	1	1	2	1	2	Training is the way to improve the work force. The more knowledge you have, the better able you will be able to apply the principles in the work force.
17544	-	-	2	2	5	2	1	3	3	2	Job training is so much more important than a masters degree in education or basket weaving. Train the people who are in the jobs now.

17553	-	-	1	4	3	3	1	2	2	2	I think training is the most important due to the fact that the contractors know more than the government employees.
17621	-	-	3	4	4	1	1	1	3	2	With the downsizing of the AF, experience is being lost. Training is becoming more important.
17645	-	5	-	3	3	3	1	6	2	2	Provides good training.
17699	-	5	-	4	6	5	1	6	3	2	AF training is the best. I am an advocate of training and send my subordinates when I can.
6.3 IMPORTANCE OF EDUCATION											
No.	Demographics										Comments
17244	-	-	3	6	6	5	1	3	3	5	Education requirement is very critical to ensuring that new employees, as well as current, are well qualified.
17260	-	-	2	1	4	5	1	2	1	2	Too much emphasis on education at the lower levels.
17493	-	3	-	4	4	6	1	3	2	2	The overall education is very important in bringing professionalism to the career field.
17651	-	-	2	4	3	1	1	2	1	2	If we have a strong education background, we easily grasp new materials and complete the required training to become an empowered work force.
17664	-	-	4	5	4	1	1	5	3	2	No way to incentives education.
17705	-	-	4	2	7	2	1	1	3	6	I feel it helps personnel with a degree, but does not help those without a degree.
17553	-	-	1	4	3	3	1	2	2	2	I think training is the most important due to the fact that the contractors know more than the government employees.
17621	-	-	3	4	4	1	1	1	3	2	With the downsizing of the AF, experience is being lost. Training is becoming more important.
17645	-	5	-	3	3	3	1	6	2	2	Provides good training.
17699	-	5	-	4	6	5	1	6	3	2	AF training is the best. I am an advocate of training and send my subordinates when I can.

Table E-5. Comments to Open-Ended Questions (Continued)

II. CERTIFICATION PROGRAM DISSATISFACTION AND CONCERNS												
1.0 PROGRAM IS MEANINGLESS/UNIMPORTANT												
No.	Demographics									Comments		
17219	-	-	4	4	5	1	1	4	3	4	People are "filling blocks," getting certification but don't understand the job.	
17234	-	-	2	4	4	3	1	1	3	3	Nothing more than another block to check off. It has gotten to the point where a certification is no more meaningful than a high school diploma. Put in the time, attend the courses and you'll receive your certification.	
17264	-	-	1	4	4	1	1	2	2	2	There are many excellent contracting specialists who have been doing outstanding work before the certification program, which proves certification programs are not necessary to make a person a person a good buyer.	
17301	6	-	-	5	6	6	2	7	4	7	Doesn't mean anything. Requirements are too easy to meet.	
17311	-	-	5	2	6	7	2	6	4	3	Hang on the wall decoration, check-off, fill the square item. Just another piece of paper program that means nothing to those outside of contracting.	
17318	1	-	-	4	1	1	1	3	1	2	Obtaining a level I certification really does not mean anything.	
17485	-	3	-	2	4	4	1	6	1	2	Seems as though certifications are given out rather than earned.	
17544	-	-	2	2	5	2	1	3	3	2	As a joke.	
17571	-	-	2	2	4	3	1	2	3	2	While I agree with questions 11-14, I do not believe the certification of the people I work with makes a difference.	
17615			3	5	4	1	1	6	3	2	If I go for the level three, will this certification mean anything in 10 years?	
17619	-	-	3	2	5	1	1	2	3	1	Inconsequential. Certification is unimportant.	
17623	5	-	-	5	5	6	2	7	4	6	It appears the certification program parallels what the contracting community was already doing in the area of training and education (so no change.)	
17633	-	-	5	5	5	3	1	2	4	3	Another square to fill.	
17636	-	-	5	5	4	3	1	6	3	3	Another square to fill.	
17639	-	-	5	4	5	5	1	5	4	7	As a "block checking" exercise.	
17662	-	3	-	3	4	5	1	3	2	2	Just filling the blocks.	
17663	-	-	4	5	4	1	1	2	3	1	Just another block to check.	
17682	-	-	5	6	6	5	2	6	4	7	The goal of a stable well educated professional work force with level I, II and III certifications must have some reward system tied to it that is both meaningful and realistic. Filling the squares with certifications just won't do it.	

Table E-5. Comments to Open Ended Questions (Continued)

2.0 PROGRAM IS NOT MEETING ITS INTENDED PURPOSE												
No.	Demographics									Comments		
17249	-	-	5	4	7	4	1	2	3	3	Sounds great on paper by not realistic	
17299	-	-	4	4	7	4	1	6	3	7	As not serving the purpose for which it is intended.	
17246	-	-	4	4	5	2	1	5	3	2	Appears to usurp an individual managers judgment when hiring or filing slots.	
17247	-	-	4	3	6	4	1	7	4	2	The certification program and various intern programs are good but do not provide a professional work force. Too many people are in the work force who are well intentioned but are not as well informed as they might think.	
17255	-	4	-	2	4	1	1	6	2	2	DAWIA seems to be a "knee-jerk" reaction to criticism. One sided, caters to systems contracting requirements and ignores operation base level peculiarities. Requires base level personnel, specifically enlisted, to learn concepts without any real opportunity to apply that knowledge. I feel there should be a dual certification system. One designed for systems level acquisition and the other base level activities. Most of the systems related concepts are never used by operational activities or forgotten before the opportunity arises for their application.	
17296	-	-	4	5	6	2	1	3	2	2	Those who operate these programs and provide certifications don't have a clue what actually goes on at the desk level, i.e., the problems which are "real." Until people at the problems level get heard and are given some power to find and implement solutions, your programs are useless for readiness, but you'll feel good about them, that is all that is ensured.	
17523	-	4	-	3	5	3	1	2	2	2	An unrealistic way of trying to professionalize the field.	
17532	-	3	-	3	1	3	2	7	3	6	Program is not realistic and puts emphasis on system level not operational.	
17560	-	-	3	3	5	1	1	1	3	2	Its intended purpose has gone by the wayside.	
17639	-	-	5	4	5	5	1	5	4	7	The idea behind it is good, but in implementation the attitude seems to be "get it done - push 'em through."	
17766	-	4	-	4	2	5	1	2	1	2	I am not sure if a great deal of thought, on an individual basis, goes into achieving the certifications. People I deal with want the certification for reasons that have nothing to do with increasing their proficiency. Its been mandated that they get certified and to protect their careers, they get certified.	

Table E-5. Comments to Open Ended Questions (Continued)

3.0 PROGRAM IS A WASTE OF RESOURCES												
No.	Demographics										Comments	
17247	-	-	4	3	6	4	1	7	4	2	The government is losing big bucks.	
17255	-	4	-	2	4	1	1	6	2	2	Training, unless focused is largely a waste of resources.	
17296	-	-	4	5	6	2	1	3	2	2	It is a waste of time and resources. These certification programs are almost as wasteful as DOD's TQM program.	
17309	-	-	5	4	6	5	1	2	4	3	Waste of time.	
17681	-	-	5	5	5	2	1	1	3	1	Waste of Time.	
4.0 PROGRAM KEEPS CHANGING												
No.	Demographics										Comments	
17214	-	-	4	3	7	7	2	1	3	1	Be consistent - true changes are necessary, however constant changes are unnecessary	
17457	1	-	-	4	1	1	1	3	1	2	The requirements keep changing, which makes it that much harder for an individual to become certified, especially when classes are so hard to get.	
17571	-	-	2	2	4	3	1	2	3	2	It keeps changing, the requirements, the classes, the grandfathering - How's on earth can it be effective with all the changes.	
17614	-	-	3	4	4	3	2	1	3	2	Don't keep changing it, it devalues the system.	
5.0 PROGRAM DOES NOT REFLECT ABILITY TO PERFORM THE JOB												
No.	Demographics										Comments	
17230	-	-	4	4	5	1	1	6	3	1	One's experience or education are not necessarily indicative on one's motivation to provide effective customer support.	
17234	-	-	2	4	4	3	1	1	3	3	It is no measure of contracting knowledge, aptitude or application, everyone gets one, regardless.	
17238	-	-	4	6	6	1	1	5	3	1	A person can achieve all the training education opportunities afforded to an individual, however, be lacking in the real life lessons learned through experience.	
17249	-	-	5	4	7	4	1	2	3	3	While training and education are valuable, I have observed they often give us educated idiots incapable of functioning in the governments bureaucracy.	
17265	-	2	-	2	2	3	1	2	1	2	I don't see how this is going to make people know their job better.	
17332	6	-	-	4	4	4	1	2	4	7	I think there may be too much rigidity and a failure to look at practical experience and application	

Table E-5. Comments to Open Ended Questions (Continued)

17337	-	-	6	4	7	6	2	4	4	7	The certification program is a good indication of ability or professionalism only if the individual being certified has the ability to conduct himself/herself in a professional manner. The same experience, training and education given to two individuals will not necessarily result in the same degree of professionalism.
17419	3	-	-	4	4	4	2	7	2	6	Bogus - does not really reflect what you know - only that that you are able to pass a course. I feel an essay exam would be beneficial to see what level of understanding and knowledge an individual has.
17459	2	-	-	4	2	2	2	6	3	2	Many individuals spend their first 2 years in one branch doing one job and are then considered contracting experts.
17538	-	3	-	2	5	5	1	7	3	6	A doctorate without the ability to "apply" the knowledge is the equivalent of illiteracy. Acquiring certification should be based on a persons ability to apply the knowledge. This would reduce the high percentage of incompetence.
17544	-	-	2	2	5	2	1	3	3	2	Promote the ones doing the work. Common sense and experience are what count. I would rather have someone working with me that knows the job and can think, rather than someone who thinks they know everything.
17571	-	-	2	2	4	3	1	2	3	2	No matter how much of these things some people have, they are still inadequate, do a poor job and think they know it all.
17612	-	-	4	5	4	1	1	6	3	2	I feel the certification program does not adequately reflect the actual knowledge of contracting personnel
17624	3	-	-	5	4	5	2	7	3	2	Certification doesn't necessarily equate to ability to do the job. In the rush to get mass certifications, I think we have let some through the cracks that shouldn't get there.
17634	4	-	-	6	4	6	2	7	4	2	I have people who are level II certified, yet they have little experience other than 1 minor job.
17638	-	-	6	4	7	5	1	2	4	7	A piece of paper does not indicate how well a person will perform his/her job.
17677	5	-	-	6	4	5	2	7	2	4	Piece of paper is worthless unless person has actually performed the function. Doubtful that a 4 year Captain/Jr. Major rated as a level III would perform successfully as a Director of Contracting.

Table E-5. Comments to Open Ended Questions (Continued)

5.1 HIGHER EDUCATION DOES NOT EQUATE TO ABILITY TO PERFORM THE JOB												
No.	Demographics										Comments	
17261	-	-	2	5	4	1	1	3	1	2	There is no possible advancement unless you meet the certification requirements and I wonder what that does to the motivation of good, experienced employees that don't meet the educational requirements.	
17297	-	-	3	4	4	1	1	6	3	2	Classes in business are not essential to being a successful contract negotiator/PCO. In fact, best negotiators/PCOs I've seen and worked with have degrees in areas other than business.	
17312	-	-	5	4	6	5	2	2	4	3	I have supervised persons with a lessor amount of experience, and they are generally less prepared to perform unless assisted.	
17544	-	-	2	2	5	2	1	3	3	2	There are more educated dummies coming out of this certification program than imaginable. Just because you have an education does not mean you are qualified for one of these jobs. Not the ones who play the education game.	
17560	-	-	3	3	5	1	1	1	3	2	We have all these educated idiots with no practicable experience. If circumstances preclude you from getting your 24/36 hours you are not promoteable, but yet you may have 20+ years of experience.	
17622	-	-	5	5	6	5	2	7	4	2	Some with PHDs couldn't award a purchase order yet they are the ones that advance.	
17638	-	-	6	4	7	5	1	2	4	7	To exclude personnel who have proven their ability on a day to day basis by denying them certain jobs because of lack of a degree, is ridicules.	
17639	-	-	5	4	5	5	1	5	4	7	We have plenty of contracting officers with masters degrees and only 2-3 years in the field who wouldn't know a sound business decision if it struck them in the face.	
17643	-	-	7	6	7	5	1	2	4	1	I believe that there are many individuals without formal college courses or degrees in other than business who are outstanding contracts people. I think the degree/business requirements in the certification requirements are short sighted in that respect.	

Table E-5. Comments to Open Ended Questions (Continued)

17646	-	-	4	2	6	3	1	6	3	2	As someone with 18 years contracting experience and little college. I feel like DOD is de-valuing my worth as a productive and useful employee. No amount of education can equal experience on the job. To require college education in today's environment (where college is the rule rather than the exception) is fine. But to insist that those with experience need to go back and get it makes no sense, and worse, suggest we should have to take a test to prove our contracting abilities when we have been doing the job all these years - what purpose does a test serve at this point?
17647	-	-	2	1	4	4	1	2	3	2	It seems it doesn't matter how much experience you have or what your appraisal rating is as long as you have a piece of paper stating you have a college education.
17682	-	-	5	6	6	5	1	6	4	7	The original goal of a masters degree or higher made AF funded training for masters degrees, but work didn't improve, only the attitude that now these people should be promoted to higher positions without experience.
17688	-	-	2	2	4	1	1	2	2	2	My experience has been vital to the mission but my lack of a degree does not mean I am not teachable or promoteable.
17709	-	-	4	2	7	5	1	2	3	3	There are many employees who currently possess up to twenty years in contracting experience who lack a bachelors degree. These people have the qualifications to do the job, however, due to the fact that they don't have a degree, they are being hindered from further promotion (beyond GS-12). I am not advocating not pursuing a college degree, however, I think in this situation everyone loses, the individual and the AF. It might be a good idea to further incentivize the work force by establishing GS 12-13 training positions for those in pursuit of masters degrees
6.0 PROGRAM STANDARDS ARE TOO LOW											
No.	Demographics										Comments
17220	-	-	3	1	7	5	1	2	3	2	Not enough experience and training.
17284	-	-	3	4	2	1	1	2	1	2	Should require more training and education.
17485	-	3	-	2	4	4	1	6	1	2	Levels for experience, training and education are too lenient.
17534	-	3	-	3	5	2	1	7	3	6	Standards are too low.

Table E-5. Comments to Open Ended Questions (Continued)

17537	-	3	-	4	3	1	1	7	1	6	I have heard many people say the majority of the contracting personnel will never see the level 3 certification. If this is the case, I suggest the criteria to obtain this level be changed to 10 years in the experience area and a masters degree in the education area.
17625	-	-	5	5	7	6	1	2	4	4	The current requirements are too weak. More should be required for each certification level.
17675	4	-	-	5	4	3	2	7	3	4	The old certification program was a better program due to more stringent requirements.
17678	5	-	-	6	6	5	2	7	4	3	Not strong enough, especially at level III.
17682	-	-	5	6	6	5	1	6	4	7	SAF/AQ has put its mark on this program and then opted for mediocrity by giving in to the years of experience and educational criteria.
17723	-	-	5	4	7	2	1	6	4	1	It has been diluted recently with the deletion of some of the original requirements. The certification does not mean as much as it originally did.
17729	-	-	5	5	5	4	1	6	4	2	Maintain the high standards or the whole process becomes meaningless.
17731	4	-	-	5	4	3	2	7	3	5	I believe people from other career fields can become very competent in contracting with the proper training in the time frame currently established.
6.1 EXPERIENCE REQUIREMENTS ARE TOO LOW											
No.	Demographics										Comments
17256	-	2	-	2	2	1	1	2	2	2	I feel more emphasis should be put on time experience and position held experience.
17274	-	4	-	4	5	5	1	6	3	2	I thought the AF was absolutely right with their initial requirement of 2-4/8 years experience. Many people in our field have one year experience, 4 times.
17298	-	-	4	4	4	1	1	6	3	4	More time (experience) is needed.
17299	-	-	4	4	7	4	1	6	3	7	Contract specialists should serve at least two years in each grade before advancing to the next grade.
17310	-	-	6	6	7	7	2	7	4	3	Was OK until AF relaxed the experience levels to 4 years. Four years is not enough to build a basis for good judgment decisions by senior managers/squadron commanders.
17312	-	-	5	4	6	5	2	2	4	3	Experience requirements should be lengthened to 2, 4 and 10 years for levels, respectively. Breadth of experience should also be addressed.
17313	4	-	-	5	4	5	2	7	4	4	I feel 8-10 years of contracting/acquisition experience should be a prerequisite for level III certification

Table E-5. Comments to Open Ended Questions (Continued)

17316	-	-	5	4	5	5	1	4	3	4	I disagree with the current certification experience requirements for level I and II. At the very least these levels should be raised by one year.
17317	6	-	-	5	7	6	2	7	4	4	Need to return experience requirements back to 1/4/8 years respectively.
17330	-	-	3	2	5	3	1	2	3	3	Experience should be raised to more number of years as it takes more than 4 years to be proficient in an executive position.
17459	2	-	-	4	2	2	2	6	3	2	More experience requirements should be included.
17494	-	3	-	2	4	1	1	2	3	3	The experience should be increased.
17497	1	-	-	4	1	2	1	2	1	2	I don't like the recent change in the number of years of experience required, especially at the level 2 and 3.
17499	-	4	-	4	5	2	1	3	3	2	The experience requirements are too lax.
17536	-	4	-	3	5	3	1	2	2	6	The experience levels changed i.e. if you've gone to 5 schools in 2 years to get level II certification - you have the schools but no real experience because you've been in school and that is not experience.
17560	-	-	3	3	5	1	1	1	3	2	I'm for improving yourself but experience in the APDP arena doesn't account for enough any more.
17611	-	-	4	4	4	1	1	1	3	1	To obtain a higher degree of knowledge, the experience level number of years is far too low. Although the training and education is of great importance, without proper application a high degree of knowledge and expertise cannot possible be obtained.
17623	5	-	-	5	5	6	2	7	4	6	In the area of experience the requirements are almost laughable. I don't know why we need requirements for experience if they are going to be so easily attained. They certainly don't provide the comfort zone in ones abilities that one would expect from a certification program. Raise Them!
17625	-	-	5	5	7	6	1	2	4	4	The 2 and 4 years experience to be a level II and level III are totally inadequate.
17627	-	-	5	5	5	5	1	6	3	2	More stringent experience requirements for GS-9 and above should be required.
17630	4	-	-	5	4	4	2	7	3	5	I believe the AF standards for experience, 2/4/8 years were smart. I believe that DOD rules of 1/2/4 years are too easy. In this complex career arena, 4 years can't be enough to qualify someone as an "expert."

Table E-5. Comments to Open Ended Questions (Continued)

17634	4	-	-	6	4	6	2	7	4	2	It is weak because the experience time is too short. Level II certification should be changed to 5 years and at least two different contracting jobs. Level III, ten years and at least 3 different contracting positions.
17638	-	-	6	4	7	5	1	2	4	7	I think the number of years required is too short a period to achieve a quality mission ready work force. This is due to the length of time required in the contracting process itself.
17639	-	-	5	4	5	5	1	5	4	7	Level II contracting officers with 2 years experience, this is a joke. You CAN NOT learn contracting in 2 years. You will not be a good contracting person in 4 years. These minimal experience requirements are obviously set so that management can continue to promote their favorites in the face of ineffective certification requirements.
17642	-	-	7	6	7	6	1	2	4	1	The experience levels are not long enough.
17666	-	-	4	4	4	1	1	6	3	3	Experience requirements should be higher.
17678	5	-	-	6	6	5	2	7	4	3	More years experience for level II and III. Currently we have situations where inexperienced people are holding director/division positions.
17679	4	-	-	5	1	2	2	7	3	4	Experience requirements (2 1/2 yrs) was appropriate until it was reduced to meet Army standards (1 1/2 yrs). Now level II lost it's prestige.
6.2 EDUCATION REQUIREMENTS ARE TOO LOW											
No.	Demographics										Comments
17228	-	-	5	6	4	5	1	5	3	5	Need more focus and increased requirements on college graduate education - specifically in the area of business and financial management. Need more financial and asset management focus. Need more financial and asset management focus.
17229	-	-	2	4	4	1	1	2	1	2	Require a BS/BA 4 year degree.
17236	-	-	2	5	2	1	1	5	2	2	Masters level degree for management positions.
17302	-	-	5	4	6	7	1	4	4	1	Although attempting to qualify members of the contracting community as a professional body, I do not believe that the educational requirements support that designation with a requirement of 24 hours of business courses or any degree.

Table E-5. Comments to Open Ended Questions (Continued)

17313	4	-	-	5	4	5	2	7	4	4	Regarding education, I feel a degree is essential to keep the "Certified Acquisition Professional" tag from being hollow. Granted, it was prudent to grandfather some of our folks, from that point on, degrees should be mandatory for any not covered under the initial "GF." Specifically, the degree should be in business, accounting or contract management.
17317	6	-	-	5	7	6	2	7	4	4	If we really want to be a professional work force, need to make a degree mandatory.
17491	-	1	-	3	2	1	1	2	2	2	It does not provide any compensation for your achievements and extra schooling you have obtained. I think you should have at least a bachelors degree in Business or a related area to come into contracting.
17493	-	3	-	4	4	6	1	3	2	2	I feel that higher levels of certification should be accompanied by a BA not just 24 hours of business courses.
17615	-	-	3	5	4	1	1	6	3	2	Education requirements should be more strict.
17625	-	-	5	5	7	6	1	2	4	4	Requirements of a Bachelors degree would appear more appropriate, if not, at least an Associates degree related to business.
17667	-	-	5	6	7	6	2	7	4	2	Should required a degree.
17678	5	-	-	6	6	5	2	7	4	3	A level three should have a degree.
17694	3	-	-	5	2	5	1	1	1	1	I believe the education requirements should become more stringent with increasing certification levels.
7.0 ENLISTED CONCERNS ABOUT THE CERTIFICATION PROGRAM											
No.	Demographics										Comments
17493	-	3	-	4	4	6	1	3	2	2	Contingency contracting training is essential to base level or operational contracting. Most members are inept when it come to functioning in the true aspects of the mission.
17536	-	4	-	3	5	3	1	2	2	6	The current certification program does not match up with enlisted OJT requirements. Programs need to compliment each other in lieu of hinder on another: i.e., what I need to get my 7-level upgrade has nothing to do with my certification requirements.
17537	-	3	-	4	3	1	1	7	1	6	Enlisted members should not be excluded from working in systems command or material command. By allowing enlisted contracting members to work at any and all commands that the AF has to offer, a mission ready professional work force is within reach.

Table E-5. Comments to Open Ended Questions (Continued)

17497	1	-	-	4	1	2	1	2	1	2	Once again the AF doesn't stick with a program because there are not enough trained people to fill the slots. Keep the pilots out.
17503	-	-	3	1	5	1	1	3	3	2	I believe it is a way to keep from promoting those employees that have given their time and energy on the job and not in college.
17523	-	4	-	3	5	3	1	2	2	2	Revise certification within contracting, i.e., operational command, etc.
17560	-	-	3	3	5	1	1	1	3	2	Over done to an extent.
17615	-	-	3	5	4	1	1	6	3	2	It is not very well understood by employees and personnel offices. It doesn't specialize enough in the types of contracts we use.
17624	3	-	-	5	4	5	2	7	3	2	Needs to go further, professionalize it completely with appropriate grade structure to back it up. Enlisted, civilian and officers are required to march to a higher standard in the acquisition field, compensate them accordingly.
17630	4	-	-	5	4	4	2	7	3	5	I believe that everyone should be required to apply every certification level, i.e., not skip levels based on their current number of years of experience.
17634	4	-	-	6	4	6	2	7	4	2	Certification levels should be something to really strive for.
17651	-	-	2	4	3	1	1	2	1	2	The certification program should be enforced continuously.
17675	4	-	-	5	4	3	2	7	3	4	To have a mission ready work force, we need more military in the career field with a better "path to achievement," just like pilots. A professional corps should be maintained without rated subs coming in as the division chief.
17682	-	-	5	6	6	5	1	6	4	7	It is the only current means to identify personnel that desire to seek professional status through self-motivated external training, but falls short. Certification won't make our jobs easier when we have less human resources to do this job. Without recertification or proficiency testing, once certified, you're a "lifer."
17683	-	-	5	5	4	5	1	1	3	1	With the on-set of IPTs, the PCO/ACO and PM should be merged at the executive level to ensure a proper team arrangement. I think a PCO should be certified as an ACO and vice versa. There should be a recertification process, e.g., a one day seminar.
17702	3	-	-	5	4	4	1	7	3	5	Presently, I don't think enough time has elapsed to assess what is in place.
17630	4	-	-	5	4	4	2	7	3	5	I believe that everyone should be required to apply every certification level, i.e., not skip levels based on their current number of years of experience.

Table E-5. Comments to Open Ended Questions (Continued)

17497	1	-	-	4	1	2	1	2	1	2	Once again the AF doesn't stick with a program because there are not enough trained people to fill the slots. Keep the pilots out.
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17702	3	-	-	5	4	4	1	7	3	5	Presently, I don't think enough time has elapsed to assess what is in place
17630	4	-	-	5	4	4	2	7	3	5	I believe that everyone should be required to apply every certification level, i.e., not skip levels based on their current number of years of experience

Table E-5. Comments to Open Ended Questions (Continued)

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17651	-	-	2	4	3	1	1	2	1	2	The certification program should be enforced continuously.
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											in the career field with a better "path to achievement," just
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											our jobs easier when we have less human resources to do
											this job. Without recertification or proficiency testing, once
											certified, your a "lifer "
17683	-	-	5	5	4	5	1	1	3	1	With the on-set of IPT's, the PCO/ACO and PM should
											be merged at the executive level to ensure a proper team
											arrangement. I think a PCO should be certified as an ACO
											and vise versa. There should be a recertification process,
											e.g., a one day seminar.
17702	3	-	-	5	4	4	1	7	3	5	Presently, I don't think enough time has elapsed to assess
											what is in place.

Table E-5. Comments to Open Ended Questions (Continued)

III. CERTIFICATION PROGRAM AND ESTABLISHED STANDARDS

1.0 EXPERIENCE STANDARDS - COMMENTS AND CONCERNS

No.	Demographics	Comments
17244	- - 3 6 6 5 1 3 3 5	Private industry experience is also a good method of acquiring experience personnel in DOD procurement
17312	- - 5 4 6 5 2 2 4 3	I have found personnel, who have at least some experience in the operational squadrons, possess invaluable skills dealing with short lead-times, emergencies, changes in specifications, delays and the effects of changes on schedules and prices.
17330	- - 3 2 5 3 1 2 3 3	An individual could be grandfathered if they have greater than 10 years of experience as of 1 Oct 91, this does not equate.
17497	1 - - 4 1 2 1 2 1 2	Newcomers to the career field are dangerous in their lack of experience on how contracting is ran
17522	- 3 - 3 5 3 1 7 3 6	People with the most training after minimal experience receive highest certification level.
17559	- - 3 3 4 2 1 3 3 2	As experienced in my working arena, this is being circumvented by management who fabricate prior experience to help individuals qualify for the ten year exception.
17679	4 - - 5 2 1 1 7 3 4	A look at the AF Contracting Summary for Cols. Lt Cols experience shows about 10% of the Cols. Lt Cols with less than 4 years experience. Who is white washing this program by granting position certification waivers for all these positions?
17694	3 - - 5 2 5 1 1 1 1	The recent changes in experience requirements were insufficiently explained, thus reducing the perceived value of the education and training.

2.0 TRAINING STANDARDS - COMMENTS AND CONCERNS

No.	Demographics	Comments
17228	- - 5 6 4 5 1 5 3 5	Most of the important topics are addressed by available courses; however, the quality of material and instructors is so variable that sometime the courses are wonderful and sometimes they are a total waste.

Table E-5. Comments to Open Ended Questions (Continued)

17230	-	-	4	4	5	1	1	6	3	1	An overall theme is that training should be customer support as your survey indicated. I continue to see emphasis on individual "kingdoms" at the office. If everyone's single goal were customer support, those kingdoms and turf battles would go away. Our training programs, coupled with emphasis on supervisory, must be stressed if we are truly seeking a work force that emphasizes customer support. We need to be motivated and understand the benefits of providing good customer support.
17244	-	-	3	6	6	5	1	3	3	5	Training is a good supplement to education and experience requirements.
12292	-	-	4	4	4	1	1	2	3	1	Required courses are adequate in subject and number for the certification program.
17298	-	-	4	4	4	1	1	6	3	4	Being a CO in three years based on a training program is a joke. It happened to me and I seriously feel that the governments interest are sometimes at undue risk. Due to the "teaming concept," COs are becoming PCO/ACO/Price Analysts/Property Administrators. More property and pricing classes required.
17299	-	-	4	4	7	4	1	6	3	7	Contract specialist should not necessarily be moved from a position but strong, knowledge PCOs should be moved moved around so that contract specialists have the benefit of learning from them.
17318	1	-	-	4	1	1	1	3	1	2	I attended MDAC Basic and then was told I could not attend operational level contracting. Why? Are they the same class?
17332	6	-	-	4	4	4	1	2	4	7	Many of the more seasoned experienced feel that their experience should waive some of the training, and I concur
17459	2	-	-	4	2	2	2	6	3	2	Rotational training is not equivalent across the board before I ever reported to the job. It is difficult to understand a class, if you have no idea what a PR or the FAR is. I also feel that it is difficult to teach any of the classes due to the wide range of experience and education levels. What one person thinks is difficult, is easy for another.
17615	-	-	3	5	4	1	1	6	3	2	It is the problems of contracting, not the rules that mess up contracting.
17627	-	-	5	5	5	5	1	6	3	2	For operational contracting, courses similar to those offered by George Washington University would enhance the training program.
17653	-	-	5	5	6	1	1	4	4	3	Have received benefit from all training. All course material not necessarily applicable, but some benefit always gained

Table E-5. Comments to Open Ended Questions (Continued)

17667	-	-	5	6	7	6	2	7	4	2	Overall, training is very good.
17688	-	-	2	2	4	1	1	2	2	2	With all the downsizing, we are expected to keep up with our work load and go to school. Training has helped me tremendously.
17694	3	-	-	5	2	5	1	1	1	1	Training classes tend to be quite elementary in nature. Instructors have a tendency to "teach the test."
17702	3	-	-	5	4	4	1	7	3	5	A paramount point of significance is that supervisors, contracting directorates, should be "held accountable" for ensuring people receive school house training. Not just lip service the requirements. In addition, there should be more in-house contract training amongst the work force. Without it, continuity goes when the people go. The organization and mission suffer. We need to ensure our most experienced contracting personnel are proactively participating in this effort and not on the side lines observing.
2.1 TRAINING AVAILABILITY											
No.	Demographics										Comments
17234	-	-	2	4	4	3	1	1	3	3	Training is not given on an as needed basis. I have requested QMT 345 every year for six years and finally got it. There are many others who need a formalized training program whereby an employees completes certain courses before gaining a GS-07, 09, 11, 12, 13, etc. in their career field.
17243	-	-	4	4	4	1	1	3	3	4	It takes too long to get required courses. Plus in order to get the next level courses one must be at the grade to attend but can't get the grade because haven't had the course
17254	-	-	3	2	3	1	1	4	1	2	I would like to have classes made more available. It has been historically very difficult to get slots. It is hard on base level to get two classes per year - possibly present more road shows.
17272	-	-	1	3	2	1	1	2	1	2	We need to have more slots available for classes we need in order to be certified. It takes too long to get all the classes necessary that are very helpful on the job.
17337	-	-	6	4	7	6	2	4	4	7	Training too frequently comes at the wrong time. Either before the knowledge is required or after managerial skills or technical knowledge have been developed
17494	-	3	-	2	4	1	1	2	3	3	I wish there were more classes available. I've been in nine years and been to 4 classes. Since we are professionals there should be more training slots to keep us trained

Table E-5. Comments to Open Ended Questions (Continued)

17497	1	-	-	5	2	2	1	6	1	2	There needs to be a greater number of slots for those who may need to get certified, but they have their experience to to fall back on. The new students only have what they have in classes.
17536	-	4	-	3	5	3	1	2	2	6	More classes need to be added. With DAU funded training, if there courses that are not part of APDP they won't pay and AF has limited funds, which means not all training is always available.
17544	-	-	2	2	5	2	1	3	3	2	We cannot get enough training that is geared towards operational matters. And if it is available, the GS 11 & 12's get priority. Why not let the trainees (GS 5-9) get the basic training. By the time your an 11 or 12 you should know your job.
17596	-	-	1	3	2	3	1	2	1	4	We are not sent to training in a timely manner. I spent my money on college, now it's their turn to spend money on my mandatory training requirements. Why do you send people to training when they cannot perform on the job much less perform in a classroom environment?
17616	-	-	4	5	4	1	1	6	3	1	It should be easier to get the classes you need.
17652	-	5	-	3	4	5	1	3	3	2	All pre and post contract administration were beneficial. However, they were received years after I had experience in this area. In my 10 years of experience, the enlisted force receives all the training after the officers and civilians
17655	-	-	2	4	3	1	1	3	2	2	The training slots are not always readily available.
17658	-	-	1	2	4	5	1	3	2	2	Current training programs should be offered as early as possible in a contracting career progression manner
17664	-	-	4	5	4	1	1	5	3	2	Make it easier to get non-APDP certification classes
17675	4	-	-	5	4	3	2	7	3	4	Need to be able to get training with having to go looking for it. I have not received any training through the system but by going straight to the training monitors at Randolph.
17682	-	-	5	6	6	5	1	6	4	7	The reward system employed by the Air Force to give the OPM courses to a chosen few is insulting. I've waited nine years for a course I have repeatedly requested and needed only to see other individuals and I get "bupkus."
17694	3	-	-	5	2	5	1	1	1	1	The real problem is the availability of training courses. Upon completion of this course (K Law), I will have met most of the requirements for level II, however, due to the non-availability of contract pricing, I will remain a level 0. This is not an acceptable situation.
17715	-	-	3	4	3	1	1	2	2	5	Availability is poor. I waited three years to get Contract Law.

Table E-5. Comments to Open Ended Questions (Continued)

17740	- - 2 4 5 1 1 2 3 2	Training is provided to the contract work force only when mandated, not when the individual needs the training to effectively perform their job. Training courses are a must and you should not have to wait long periods of time to get them and yet be expected to get the job done efficiently.
17766	- 4 - 4 2 5 1 2 1 2	As an enlisted member in contracting, it is frustrating and disheartening to have earned a degree, still seek higher education off duty, but have to compete for scarce training slots with individuals who are simply going through the motions.
2.2 TRAINING APPLICABILITY		
No.	Demographics	Comments
17233	- - 4 4 5 5 1 5 3 2	Making courses that may not be relevant mandatory results in unnecessary effort spent on classes. Find out what the contracting work force is actually dealing with and address needs, necessary and desirable training, and improvements. Mandatory courses should address general real world situations. Other courses should address specialized real world situations. Should be revised and tailored to fit the needs of the customers. Make only what is generally necessary mandatory. Mandatory courses should have particular value for general contracting population.
17234	- - 2 4 4 3 1 1 3 3	It is my experience that too often courses need to be geared to not only beginners (who may have an idea what's going on), journeymen (who have a good idea what's going on) and under grads (who either know it all or have been so far removed for so long, that they're no better off than the beginner).
17247	- - 4 3 6 4 1 7 4 2	The training would be focused to the specific organizational mission and identified problems within the organization.
17249	- - 5 4 7 4 1 2 3 3	Need to gear to specific jobs - systems acq vs operational.
17254	- - 3 2 3 1 1 4 1 2	I feel more attention should be given to base level items
17254	- - 1 4 4 1 1 2 2 2	Courses should be directed to the level of contracting you are performing.
17260	- - 2 1 4 5 1 2 1 2	Often, training is not specialized to level of contracting performed.

Table F-5. Comments to Open Ended Questions (Continued)

17261	-	-	2	5	4	1	1	3	1	2	I would like to see the training requirements be geared to the level of contracting. If I am working operational level contracting and take classes geared to systems level, I wonder if I will get job specific training. Then if I were ever to get a transfer to a systems level assignment would I not then need a refresher course that was systems level specific.
17264	-	-	1	4	4	1	1	2	2	2	It is a waste of time and government money to send people to courses, teaching material they do not need and will not use. Courses should be instructive and directed to the type of contracting one is doing. Delete those not necessary to job. Base level pricing is sufficient for small purchases. I don't think the intermediate pricing course should be required for base level contracting.
17265	-	2	-	2	2	3	1	2	1	2	Things people learn in class really don't help them in their job because they don't use it very often, if even at all.
17289	-	5	-	4	4	3	1	6	3	2	Make training relate your job assignment not an across the board level rating based on rank or grade.
17309	-	-	5	4	6	5	1	2	4	3	Most training and formal education does not teach one how to do contracting. Most of the theory taught does not relate to the workplace.
17310	-	-	6	6	7	7	2	7	4	3	Some of the mandatory courses are a joke. They do not even deal with the central issues and requirements of the subject, e.g. Executive Administration never even opened the FAR to the relevant material, spent most of the time on touchy-feely fluff.
17536	-	4	-	3	5	3	1	2	2	6	Program must meet all areas of contracting, operational, R&D, Central Systems, perhaps separate requirements for each area.
17553	-	-	1	4	3	3	1	2	2	2	Although the training is given, how we are supposed to do it, reality at the job is not how its done.
17570	-	-	2	2	4	3	1	2	3	2	The training classes are adequate. It's the application and performance once I return home.
17596	-	-	1	3	2	3	1	2	1	4	The government requires us to have education, but they don't fulfill their end of the training requirements.
17622	-	-	5	5	6	5	2	7	4	2	Most required classes are so general no "real" information is gained. The classes offer a side benefit which is truly worthwhile the interaction of students at lunch, after-hours, etc. Most of the class material is too basic, too general, or inapplicable to "experienced professionals."

Table E-5. Comments to Open Ended Questions (Continued)

17639	-	-	5	4	5	5	1	5	4	3	No formal course is going to give the person the knowledge he/she needs to sit at the desk and do the job. Formal courses are helpful in providing information overviews that give the person familiarity with terms, rules, and general procedures. Doing the work is what makes the learning stick. Too many people in contracting today seem to have the attitude that formal training is a panacea for all our problems - problems that stem from promoting unqualified, inexperienced people into contracting jobs. It seems to me that this is because many of the people making these decisions fall into that category themselves.
17646	-	-	4	2	6	3	1	6	3	2	Rather than mandatory classes for 1102's why not classes for specific areas - i.e., if I'm an administrator send me to admin. by the time I am assigned to a job to use some of the class info, so much time has elapsed that what hasn't changed I've forgotten. Also training is almost always "systems" oriented. I only need operational contracting training.
17655	-	-	2	4	3	1	1	3	2	2	I feel certain courses should be pre-requisites for other course, i.e. MDAC basic before cost and pricing.
17699	-	5	-	4	6	5	1	6	3	2	There needs to be mandatory classes established for enlisted grades to ensure attendance and completion.
17700	-	-	4	2	6	4	1	1	1	4	Much of the training is geared for central contracting. Not a lot for base level contract, FFP. In 15 years of contracting I have never dealt with any contracts other than FFP.
17740	-	-	2	4	5	1	1	2	3	2	Requiring operational contract specialists to train in areas only required by systems contract specialists is unfair and does nothing to help ensure operational personnel provide effective customer support. Civilians in the field take a back seat on training requirements.
2.3 TRAINING NEEDS AND SUGGESTIONS											
No.	Demographics										Comments
17229	-	-	2	4	4	1	1	2	1	2	More Base level courses.
17235	-	-	4	4	7	1	1	5	3	5	I believe the CAS courses should be mandatory because it is a law that needs to be understood by acquisition officials. I have had experience where PCO's directed contractor's to violate CAS without knowing the impact of their directions.
17236	-	-	2	5	2	1	1	5	2	2	Training in cost proposal evaluation and source selection

Table E-5. Comments to Open Ended Questions (Continued)

17238	-	-	4	6	6	1	1	5	3	1	Allows the level 3 courses to be made available to aspiring level 2 personnel. This would enable one to prepare for upward positions.
17240	-	-	4	5	4	1	1	5	3	1	Allow some of the training requirements to be completed by correspondence.
17247	-	-	4	3	6	4	1	7	4	2	Recommend trained team(s) of 1102s be developed for the purpose of going to the field to provide OJT training. All training classes are beneficial, but the workshop environment is much more conducive to learning, especially working joint case problems with plenty of question and answer time.
17254	-	-	3	2	3	1	1	4	1	2	I feel each level should have 1-2 base level elective type courses for certification. This would give the Contract Administrator the bigger picture as well as what is happening at base level.
17268	-	1	-	2	3	1	1	3	1	2	I think that some formal training classes should be given on specific subjects like supplies, or services or BCAS and how to input different contract types correctly. Specific classes for different sections. Most classes are related to the construction branch and are not as beneficial to people working in supplies or services.
17273	-	4	-	2	4	1	1	3	1	2	I have not had the chance to attend too many schools, but I don't believe there is any classes on contingency contracting and as a military member - this might standardize how CO's handle different situations.
17274	-	4	-	4	5	5	1	6	3	2	Allow senior NCO's with degrees and experience the opportunity to achieve level III by opening more slots or exec courses.
17285	-	4	-	2	3	1	1	3	2	2	Classes should be longer. There is so much valuable information it is hard to absorb in the short few weeks the classes run.
17297	-	-	3	4	4	1	1	6	3	2	Training is sometimes given too early in ones career. When you are brand new you don't even remember what FAR stands for let alone applying conceptual ideas learned in a classroom to the real world at your desk. First some OJT, then classes would be more beneficial - mean more to you. I think more training classes that cover other areas of contracting would help to round out a persons knowledge base on the overall contracting field. That would help to the "big picture" of how procurement contributes to the overall mission.

Table E-5. Comments to Open Ended Questions (Continued)

17298	-	-	4	4	4	1	1	6	3	4	Need more property classes.
17316	-	-	5	4	5	5	1	4	3	4	Less emphasis on assembly line training. By level II, we should start seminar based programs with emphasis on learning, not tests. Also, should include discussion on mission needs, why we are here, and the importance of procurement within DOD.
17332	6	-	-	4	4	4	1	2	4	7	I think training is not adequate when it comes to negotiation techniques, style as well as communication. Negotiations and communication are an integral part from beginning through all management positions. One is continually negotiating for contracts, terms manpower, labor relations, etc. Truly effective communication is critical. Many people are simply lacking in the communications arena.
17527	-	-	4	4	4	2	1	3	3	2	Opportunity in related occupations after those requiring mandatory training have been instructed.
17535	-	5	-	4	5	4	2	7	3	6	Certification requirements should require both pre and post award courses since we are cradle-to-grave.
17607	-	-	4	4	4	1	1	6	3	1	Basic classes should not be scheduled so early in the career because you have no idea what they are talking about, wait 6 months so they have a basic idea of what an acquisition is.
17621	-	-	3	4	4	1	1	1	3	2	The training being provided might be more beneficial if more time could be spent learning rather than just cramming information in. (Too much information covered in too short a period of time.)
17630	4	-	-	5	4	4	2	7	3	5	I would prefer to see Contract Law required for level I certification.
17634	4	-	-	6	4	6	2	7	4	2	Move Contract Law to level I, level I to 2 years, and add both pre and admin to level III. Also need decision making in Contract Management.
17657	2	-	-	4	1	1	1	7	1	2	Having frequent breaks at the work place seems detrimental to my really "getting into the business." It might be a good idea then to have general courses once one has already met the certification qualifications to refresh myself on the material.
17658	-	-	1	2	4	5	1	3	2	2	Perhaps a core in-depth course should be offered to new personnel.
17662	-	3	-	3	4	5	1	3	2	2	Don't emphasize testing in classrooms, but rather instructional training. Develop the "how to's" in performing the job. Should require advanced training.

Table E-5. Comments to Open Ended Questions (Continued)

17678	5	-	-	6	6	5	2	7	4	3	Program does not include critical training, like negotiating, etc. Level III should require training in leadership and management.
17688	-	-	2	2	4	1	1	2	2	2	On site training might be a better solution to workers so they can still be available in a pinch.
17694	3	-	-	5	2	5	1	1	1	1	Systems contracting needs access to Systems 100 and 200, and should be required courses.
17699	-	5	-	4	6	5	1	6	3	2	Students should go TDY for their training because work tends to be of such importance that they can't get away. Work and other activities distract from the focus.

2.4 ON-THE-JOB TRAINING

No.	Demographics										Comments
17247	-	-	4	3	6	4	1	7	4	2	The hands on type training is most beneficial as procedures are retained easier.
17255	-	4	-	2	4	1	1	6	2	2	Manning constraints severely limit effectiveness of OJT at operational contracting activities. OJT is hit or miss, depending on current situations/requirements.
17264	-	-	1	4	4	1	1	2	2	2	I learn more through OJT because I learn as I need it and can apply it immediately and see the results.
17419	3	-	-	4	4	4	2	7	2	6	Hands on.
17639	-	-	5	4	5	5	1	5	4	7	OJT is the most important element of contracting training
17699	-	5	-	4	6	5	1	6	3	2	We must ensure proper hands-on training and groom for later positions.

2.5 REFRESHER/FOLLOW-ON TRAINING

No.	Demographics										Comments
17291	-	-	4	4	4	1	1	2	3	3	There should be refresher courses that constantly update contract professionals which may be on-site.
17317	6	-	-	5	7	6	2	7	4	4	I see a need for continuing training education to maintain certification.
17626	3	-	-	5	4	5	2	7	3	2	Review the fulfillment policy and have refresher type courses.
17658	-	-	1	2	4	5	1	3	2	2	Lack of adequate follow-on training.

3.0 EDUCATION STANDARDS - COMMENTS AND CONCERNS

No.	Demographics										Comments
17269	-	-	2	2	3	1	1	2	1	2	Not enough guidelines were disseminated down to the base level contracting and CPO offices for administering this program, especially in regards to what classes/courses were acceptable for the 24 hour of business.

Table E-5. Comments to Open Ended Questions (Continued)

17522	-	3	-	3	5	3	1	7	3	6	Education does not factor in unless specialized in contracting arena.
17549	-	4	-	3	1	1	1	2	1	2	I think 24 semester hours is too many. Twelve is more appropriate for level I.
17612	-	-	4	5	4	1	1	6	3	2	Most people who have been in contracting for any length of time have been grandfathered into certification levels. How can this be comparable to those who are hired at a later date or those in the field who are trying to better themselves with advanced education? The certification program is similar to most other AF programs, if you hang around long enough, it doesn't matter if you are continuing your education or not.
17625	-	-	5	5	7	6	1	2	4	4	A minimum education level was established, now there is a concentrated effort to find ways around obtaining the 24 semester hours.
3.1 EDUCATION FUNDING ISSUES											
No.	graphics										Comments
17270	-	2	-	2	3	1	1	2	1	2	I think, since it is mandatory that the classes are required for for our certification, they should be paid for 100%.
17567	-	3	-	2	4	1	1	2	3	2	If we are requiring people to have some college credits, which is not required in other AFSCs, we should pay for them.
17644	-	3	-	2	2	5	1	3	2	1	If education (24 hrs business) is required, the government (not the individual) should fund the requirement.
17688	-	-	2	2	4	1	1	2	2	2	The reason a lot of people do not have their degrees is because they could not afford it.
3.2 EDUCATIONAL DISCIPLINE CONCERNS											
No.	graphics										Comments
17231	-	-	3	2	3	1	1	3	3	-	24 hours of business should carry more weight than having just a degree.
17627	-	-	5	5	5	5	1	6	3	2	The four year degree should be in related fields such as business rather than general.
17628	3	-	-	5	4	4	1	7	4	7	I feel the degree should be business related just any degree.

Table E-5. Comments to Open Ended Questions (Continued)

3.3 DISSATISFACTIONS WITH EDUCATION REQUIREMENTS												
No.	graphics										Comments	
17311	-	-	5	2	6	7	2	6	4	3	Get rid of the mandatory college degree requirement.	
17622	-	-	5	5	6	5	2	7	4	2	De-emphasize education!	
17699	-	5	-	4	6	5	1	6	3	2	High grade civilians who enter programs on degrees don't have my respect.	

Table E-5. Comments to Open Ended Questions (Continued)

IV. TRAINING COURSES PERCEIVED MOST BENEFICIAL												
No.	Demographics										Most Beneficial	Comments
17219	-	-	4	4	5	1	1	4	3	4	MDAC - Basic	
17231	-	-	3	2	3	1	1	3	3	-	MDAC - Basic	
17233	-	-	4	4	5	5	1	5	3	2	MDAC - Basic	
17236	-	-	2	5	2	1	1	5	2	2	MDAC - Basic	FAR familiarization.
17245	-	-	3	4	4	1	1	5	1	2	MDAC - Basic	Information could be applied in everyday world.
17256	-	2	-	2	2	1	1	2	2	2	MDAC - Basic	
17260	-	-	2	1	4	5	1	2	1	2	MDAC - Basic	
17284	-	-	3	4	2	1	1	2	1	2	MDAC - Basic	
17289	-	5	-	4	4	3	1	6	3	2	MDAC - Basic	Familiarized me with the FAR
17292	-	-	4	4	4	1	1	2	3	1	MDAC - Basic	
17309	-	-	5	4	6	5	1	2	4	3	MDAC - Basic	
17331	-	-	5	2	6	7	2	7	4	3	MDAC - Basic	Covered a lot of material
17333	-	-	6	5	7	5	1	2	4	7	MDAC - Basic	
17456	-	-	2	4	2	7	1	2	3	2	MDAC - Basic	Most specific and detailed.
17473	1	-	-	6	2	4	1	7	2	2	MDAC - Basic	
17474	-	-	1	5	1	1	1	2	1	2	MDAC - Basic	Good Overview.
17651	-	-	2	4	3	1	1	2	1	2	MDAC - Basic	Teaches the usage of the different regulations and manuals.
17657	2	-	-	4	1	1	1	7	1	2	MDAC - Basic	General coverage gave a strong foundation to apply at the workplace.
17658	-	-	1	2	4	5	1	3	2	2	MDAC - Basic	
17719	-	4	-	4	4	1	1	2	3	7	MDAC - Basic	
17327	3	-	-	5	2	3	1	2	3	1	Central Systems	Complete comprehensive coverage.
17623	5	-	-	5	5	6	2	7	4	6	Central Systems	Most helpful since it was my introduction to the contracting career field.
17628	3	-	-	5	4	4	1	7	4	7	Central Systems	Taught me contracting fundamentals.
17228	-	-	5	6	4	5	1	5	3	5	Operational Contracting	
17457	1	-	-	4	1	1	1	3	1	2	Operational Contracting	Gave me a better understanding of the job.
17471	1	-	-	4	1	1	1	2	1	2	Operational Contracting	
17563	-	-	3	5	4	4	1	2	3	2	Operational Contracting	

Table E-5. Comments to Open Ended Questions (Continued)

17231	-	-	3	2	3	1	1	3	3	-	Principles of Pricing	Directly applicable to my job.
17246	-	-	4	4	5	2	1	5	3	2	Principles of Pricing	Applicable to job.
17254	-	-	3	2	3	1	1	4	1	2	Principles of Pricing	
17292	-	-	4	4	4	1	1	2	3	1	Principles of Pricing	
17559	-	-	3	4	5	2	1	3	3	2	Principles of Pricing	
17566	2	-	4	2	1	1	2	1	2	2	Principles of Pricing	
17626	3	-	5	4	5	2	7	3	2	2	Principles of Pricing	
17627	-	-	5	5	5	5	1	6	3	2	Principles of Pricing	
17688	-	-	2	2	4	1	1	2	2	2	Principles of Pricing	
17765	-	-	2	4	2	1	1	2	2	1	Principles of Pricing	Helped me understand the process better.
17220	-	-	3	1	7	5	1	2	3	2	Base Level Pricing	
17256	2	-	2	2	1	1	2	2	2	2	Base Level Pricing	
17260	-	-	2	1	4	5	1	2	1	2	Base Level Pricing	
17289	5	-	4	4	3	1	6	3	2	2	Base Level Pricing	Related to current job assignment.
17537	3	-	4	3	1	1	7	1	6	6	Base Level Pricing	
17238	-	-	4	6	6	1	1	5	3	1	Def Cost & Price Analysis	
17299	-	-	4	4	7	4	1	6	3	7	Def Cost & Price Analysis	Price/Cost savings is extremely important; we must know how to go about it.
17233	-	-	4	4	5	5	1	5	3	2	Contract Law	
17261	-	-	2	5	4	1	1	3	1	2	Contract Law	
17264	-	-	1	4	4	1	1	2	2	2	Contract Law	I learned things which I found very applicable.
17269	-	-	2	2	3	1	1	2	1	2	Contract Law	Learned a lot about government rights and how/why we have those rights.
17270	2	-	2	3	1	1	2	1	2	2	Contract Law	
17280	2	-	2	3	1	1	2	1	2	2	Contract Law	
17285	2	-	2	3	1	1	3	2	2	2	Contract Law	It is important to know what you can and cannot do.
17294	-	-	4	4	4	1	1	6	3	3	Contract Law	
17305	4	-	3	4	4	1	6	3	2	2	Contract Law	Case studies allow you to see how some of the concepts actually work.
17312	-	-	5	4	6	5	2	6	4	3	Contract Law	Gave historical view on how we contract & current rational for ways to handle changes.

Table E-5. Comments to Open Ended Questions (Continued)

17567	-	3	-	2	4	1	1	2	3	2	Contract Law	
17568	-	-	3	4	4	3	1	3	1	6	Contract Law	
17622	-	-	5	5	6	5	2	7	4	2	Contract Law	Provides fundamentals applicable to all contracts.
17624	3	-	-	5	4	5	2	7	3	2	Contract Law	Case studies similar to actual conditions.
17626	3	-	-	5	4	5	2	7	3	2	Contract Law	
17627	-	-	5	5	5	5	1	6	3	2	Contract Law	
17634	4	-	-	6	4	6	2	7	4	2	Contract Law	
17645	-	5	-	3	3	3	1	6	2	2	Contract Law	
17646	-	-	4	2	6	3	1	6	3	2	Contract Law	Took it just when I was on a job that I could really use the information presented.
17647	-	-	2	1	4	4	1	2	3	2	Contract Law	Now know more when legals state a contract is legally sufficient.
17762	-	-	1	4	4	1	1	2	2	1	Contract Law	Can be applied to my immediate job.
17766	-	4	-	4	2	5	1	2	1	2	Contract Law	
17768	3	-	-	6	2	1	1	1	2	1	Contract Law	Provides fundamentals.
17238	-	-	4	6	6	1	1	5	3	1	Intermediate Pricing	
17246	-	-	4	4	5	2	1	5	3	2	Intermediate Pricing	
17219	-	-	4	4	5	1	1	4	3	4	MDAC - Advanced	
17220	-	-	3	1	7	5	1	2	3	2	MDAC - Advanced	Subject matter closely related to job.
17233	-	-	4	4	5	5	1	5	3	2	MDAC - Advanced	
17245	-	-	3	4	4	1	1	5	1	2	MDAC - Advanced	Information could be applied in everyday world.
17274	-	4	-	4	5	5	1	6	3	2	MDAC - Advanced	
17291	-	-	4	4	4	1	1	2	3	3	MDAC - Advanced	
17292	-	-	4	4	4	1	1	2	3	1	MDAC - Advanced	
17293	-	-	3	4	4	3	1	2	3	2	MDAC - Advanced	
17330	-	-	3	2	5	3	1	2	3	3	MDAC - Advanced	Well rounded information provided for both pre and post award.
17331	-	-	5	2	6	7	2	7	4	3	MDAC - Advanced	covered a lot of material.
17459	2	-	-	4	2	2	2	6	3	2	MDAC - Advanced	
17570	-	-	2	2	4	3	1	2	3	2	MDAC - Advanced	
17719	-	4	-	4	4	1	1	2	3	7	MDAC - Advanced	

Table E-5. Comments to Open Ended Questions (Continued)

17221	-	-	4	5	4	1	1	6	3	3	Advanced Administration	
17222	-	-	4	4	4	1	1	8	3	3	Advanced Administration	Discussion of cases very beneficial.
17230	-	-	4	4	5	1	1	6	3	1	Advanced Administration	Received good DCMC perspective, gave balance to my perspective as a buyer/CO.
17254	-	-	3	2	3	1	1	4	1	2	Advanced Administration	
17273	-	4	-	2	4	1	1	3	1	2	Advanced Administration	
17286	4	-	-	5	4	4	1	7	3	7	Advanced Administration	
17306	-	2	-	1	4	1	1	2	3	2	Advanced Administration	
17312	-	-	5	4	6	5	2	6	4	3	Advanced Administration	It allows in-depth discussions on topics which cause most contracting problems
17324	-	-	2	1	2	1	1	2	1	5	Advanced Administration	
17419	3	-	-	4	4	4	2	7	2	6	Advanced Administration	Hands on.
17525	3	-	-	6	4	5	1	6	3	3	Advanced Administration	
17559	-	-	3	4	5	2	1	3	3	2	Advanced Administration	
17634	4	-	-	6	4	6	2	7	4	2	Advanced Administration	
17220	-	-	3	1	7	5	1	2	3	2	Base Administration	
17229	-	-	2	4	4	1	1	2	1	2	Base Administration	Work operational, course was tailored to daily operations.
17283	-	-	1	3	4	1	1	3	1	2	Base Administration	
17297	-	-	3	4	4	1	1	6	3	2	Base Administration	Addressed real situations, not just conceptual.
17644	-	3	-	2	2	5	1	3	2	1	Base Administration	Studied clauses.
17298	-	-	4	4	4	1	1	6	3	4	Overhead Management	
17219	-	-	4	4	5	1	1	4	3	4	Overhead Management	
17222	-	-	4	4	4	1	1	8	3	3	Overhead Management	
17316	-	-	5	4	5	5	1	4	3	4	Executive Contracting	Current procurement topics and the big picture approach.
17627	-	-	5	5	5	5	1	6	3	2	Executive Contracting	
17221	-	-	4	5	4	1	1	6	3	3	Value Engineering	
17234	-	-	2	4	4	3	1	1	3	3	Negotiation Workshop	Class was good practice.
17247	-	-	4	3	6	4	1	7	4	2	Negotiation Workshop	
17537	-	3	-	4	3	1	1	7	1	6	Contract Placement	
17567	-	3	-	2	4	1	1	2	3	2	Contract Placement	
17627	-	-	5	5	5	5	1	6	3	2	Contract Placement	
17645	-	5	-	3	3	3	1	6	2	2	Contract Placement	
17260	-	-	2	1	4	5	1	2	1	2	Property Management	

Table E-5. Comments to Open Ended Questions (Continued)

V. TRAINING COURSES PERCEIVED LEAST BENEFICIAL												
No.	Demographics									Least Beneficial	Comments	
17230	-	-	4	4	5	1	1	6	3	1	MDAC - Basic	
17234	-	-	2	4	4	3	1	1	3	3	MDAC - Basic	Course was too advanced for someone with no experience.
17246	-	-	4	4	5	2	1	5	3	2	MDAC - Basic	
17264	-	-	1	4	4	1	1	2	2	2	MDAC - Basic	I was already familiar with the FAR and DFAR.
17273	-	4	-	2	4	1	1	3	1	2	MDAC - Basic	
17317	6	-	-	5	7	6	2	7	4	4	MDAC - Basic	Should have a minimum of six months hands on before attending.
17570	-	-	2	2	4	3	1	2	3	2	MDAC - Basic	
17627	-	-	5	5	5	5	1	6	3	2	MDAC - Basic	
17646	-	-	4	2	6	3	1	6	3	2	MDAC - Basic	
17647	-	-	2	1	4	4	1	2	3	2	MDAC - Basic	
17419	3	-	-	4	4	4	2	7	2	6	Operational Contracting	Too broad, difficult to apply.
17537	-	3	-	4	3	1	1	7	1	6	Operational Contracting	
17566	2	-	-	4	2	1	1	2	1	2	Operational Contracting	
17221	-	-	4	5	4	1	1	6	3	3	Principles of Pricing	Not pertinent to job.
17291	-	-	4	4	4	1	1	2	3	3	Principles of Pricing	
17306	-	2	-	1	4	1	1	2	3	2	Principles of Pricing	
17327	3	-	-	5	2	3	1	2	3	1	Principles of Pricing	Subject coverage was too basic for college graduate - should be 1 week.
17464	1	-	-	6	2	4	1	7	2	2	Principles of Pricing	Not designed for the type of work I do.
17473	-	-	1	5	1	1	1	2	1	2	Principles of Pricing	
17628	3	-	-	5	4	4	1	7	4	7	Principles of Pricing	Very little application to job.
17647	-	-	2	1	4	4	1	2	3	2	Principles of Pricing	
17269	-	-	2	2	3	1	1	2	1	2	Base Level Pricing	I do very little negotiations that require cost breakdown of contractors proposals.
17297	-	-	3	4	4	1	1	6	3	2	Def Cost & Price Analysis	Better for price analysts. too much detail.
17330	-	-	3	2	5	3	1	2	3	3	Def Cost & Price Analysis	Too in depth for a new specialist. Should be taken after many years in contracting.

Table E-5. Comments to Open Ended Questions (Continued)

17231	-	-	3	2	3	1	1	3	3	-	Contract Law	Still have to refer legal matters to lawyers anyway.
17236	-	-	2	5	2	1	1	5	2	2	Contract Law	
17245	-	-	3	4	4	1	1	5	1	2	Contract Law	Poor instructors, material not presented well.
17254	-	-	3	2	3	1	1	4	1	2	Contract Law	
17286	4	-	-	5	4	4	1	7	3	7	Contract Law	
17289	-	5	-	4	4	3	1	6	3	2	Contract Law	If I need legal advice, I go to a lawyer.
17293	-	-	3	4	4	3	1	2	3	2	Contract Law	Bad Instructor
17333	-	-	6	5	7	5	1	2	4	7	Contract Law	
17455	-	2	-	2	4	1	1	2	1	2	Contract Law	Needed more focus on government contracts.
17719	-	4	-	4	4	1	1	2	3	7	Contract Law	
17527	-	-	4	4	4	2	1	3	3	2	Intermediate Pricing	Related to systems acquisition and not the day to day aspects of pricing.
17246	-	-	4	4	5	2	1	5	3	2	MDAC - Advanced	
17260	-	-	2	1	4	5	1	2	1	2	MDAC - Advanced	
17289	-	5	-	4	4	3	1	6	3	2	MDAC - Advanced	Taught at systems level, not base level.
17316	-	-	5	4	5	5	1	4	3	4	MDAC - Advanced	Too mechanical in its approach. Instructors read out of the book.
17624	3	-	-	5	4	5	2	7	3	2	MDAC - Advanced	Too late in my career to do any good.
17634	4	-	-	6	4	6	2	7	4	2	MDAC - Advanced	
17289	-	5	-	4	4	3	1	6	3	2	Advanced Administration	
17228	-	-	5	6	4	5	1	5	3	5	Overhead Management	
17312	-	-	5	4	6	5	2	6	4	3	Executive Contracting	
17623	5	-	-	5	5	6	2	7	4	6	MDAC - Executive	Gave me no new tools, just a rehash through case study.
17627	-	-	5	5	5	5	1	6	3	2	MDAC - Executive	
17312	-	-	5	4	6	5	2	6	4	3	Executive Administration	
17309	-	-	5	4	6	5	1	2	4	3	Value Engineering	
17229	-	-	2	4	4	1	1	2	1	2	Negotiation Workshop	Mostly common sense, could be a 3 day seminar.
17270	-	2	-	2	3	1	1	2	1	2	Contract Placement	
17622	-	-	5	5	6	5	2	7	4	2	Environmental Contracting	Too basic.

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